

Dictionary of Metabolite Activity

Activity categories:

Abortifacient
Acaricidal
Allelopathic
Allergenic
Amnestic
Analgesic
Anesthetic
Anthelmintic
Antiallergic
Antiamebic
Antianemic
Anti-anxiety
Antiarrhythmic
Antiarthritic
Antiasthmatic
Antibacterial
Anticancer
Anticholinergic
Anticholinesterase
Anticonvulsant
Antidementic
Antidepressant
Antidermatitic
Antidiabetic
Antidiarrheic
Antidote
Antiedemic
Antiemetic
Antifertility
Antifungal
Antigout
Antihepatitic
Antihepatotoxic
Anti-HIV
Anti-HSV
Antihyperlipidemic
Antihypertensive
Anti-inflammatory
Antileishmanial
Antileptotic

Antimalarial
Antimicrobial
Antimigraine
Anti-muscle rigidity
Antimutagenic
Antimyasthenic
Antineoplastic
Antioxidant
Antiparkinson
Antiprotozoal
Antipsychotic
Antipyretic
Antiseptic
Antispasmodic
Antithrombotic
Anti-tremor
Antitrypanosomal
Antituberculous
Antitumor
Antitussive
Antiulcerogenic
Antiviral
Anxiogenic
Attractant
Biomarker
Cardiotonic
Carminative
Choleretic
CNS stimulant
Convulsant
Cytotoxic
Defense
Dental
Depilatory
Dermatitic
Diaphoretic
Diuretic
Edematous
Emetic
Emulsifying agent
Enhance flowering
Enhance fruiting
Enhance germination

Enhance leaf growth
Enhance plant growth
Enhance plant growth
Enhance root growth
Enhance stem growth
Essential amino acid
Expectorant
Feeding attractant
Feeding deterrent
Flavor
Genotoxic
Hallucinogenic
Hemolytic
Hemostatic
Hepatotoxic
Herbicidal
Hormonal
Hypnotic
Immunomodulative
Immunostimulant
Immunosuppressant
Induce tremor
Inhibit CYP
Inhibit flowering
Inhibit fruiting
Inhibit germination
Inhibit leaf growth
Inhibit plant growth
Inhibit root growth
Inhibit spore germination
Inhibit stem growth
Insecticidal
Irritant
Laxative
Molluscicidal
Muscle relaxant
Mutagenic
Narcotic
Nematocidal
Neurotoxic
Nonessential amino acid
Nucleic acid
Nutrient

Odor
Other cardiovascular agent
Other digestive organ agent
Other genitourinary agent
Other health agent
Other nervous system agent
Other respiratory tract agent
Oviposition attractant
Oviposition deterrent
Oxytocic
Pediculicidal
Phototoxic
Phytoalexin
Phytotoxic
Pigment
Piscicidal
Pneumotoxic
Pollinator attractant
Psychotomimetic
Repellent
Sedative
Sex attractant
Solvent
Stomachic
Teratogenic
Tonic
Toxic
Tumorigenic
UV shield
Vitamin

Dictionary of Metabolite Activity

Individual descriptions of biological activities:

(+)-epipinoresinol is an immunomodulating agent with anticomplementary activity

5-lipoxygenase inhibitor, with an LC50 value of 28.2 microM

7-8 times less toxic compared with tubocurarine, but has a 5-6 times wider therapeutic spectrum

a cardiac stimulant

a constituent of lubricants, soaps and shaving creams

a cytotoxic intercalating agent

a deficiency syndrome has been described with symptoms of fatigue, headache and sleep disturbance

a direct action upon the heart, terminating in ventricular fibrillation

a fungicide

a germination inhibitor

a hundred times more active than quinine as an antimalarial drug

a hypotensive agent

a hypotensive response in anaesthetised with intravenous doses of 5-15 mg/kg

a key intermediate in the biogenesis of all betalains

a mydriatic

a neurotransmitter in the brain

a nucleoside

a nucleotide

a nutrient

a nutritional factor, often described as a vitamin of the B group

a part of respiratory chain-reaction process

a possible anticancer agent

a potent antifungal agent

a purgative

a serotonin antagonist

a strong irritant, causing damage to mucous membranes and skin

a sympathomimetic neurohormone with mainly alpha-adrenergic activity

a synergistic effect on antioxidants present

a very strong local anaesthetic action

a volatile, inflammable liquid, well known as an organic solvent

a weak mutagenic effect

a weak oxytocic

abdominal pains

abortifacient

abortifacient activity

abortifacient property

about a quarter of the hypotensive activity of reserpine

about twice as sweet as sucrose

about twice as toxic as aconitine and slightly more so than bikhacanitine
absorption through the skin can be fatal
acaricide
accelerate formation of ribosomes
accumulate as a phytoalexin in fruit
accumulate during late autumn and winter and be consumed in the spring and appear to provide winter-hardiness
ACE inhibitor
Acetylcholine antagonist
Acetylcholinesterase inhibitory activities
AChE inhibitor
Acronychia pedunculata is used for treating asthma
Acronychia pedunculata is used for treating diarrhoea
Acronychia pedunculata is used for treating rheumatism
Acronychia pedunculata is used for treating ulcers
act antagonistically against the hypotensive effect of ethanol
act as a bud growth inhibitor
act as a central hypotensive agent
act as a central nervous system depressant
act as a cytoplasmic osmoticum during salt stress
act as a cytoplasmic osmoticum to counter salt stress
act as a depressant of the central nervous system
act as a depressant on central nervous system
act as a DNA biosynthesis inhibitor
act as a growth inhibitor
act as a nodulation signal in the symbiosis with its legume host, *Pisum sativum*
act as a plant growth stimulant in low concentrations
act as a protein inhibitor
act as a serotonin antagonist
act as a stimulant and used in doping
act as a stimulator of germination
act as a substrate for arginase, arginine decarboxylase and L-amino acid oxidase
act as an agonist of antitremor action of DOPA
act as an inhibitor of DNA and RNA polymerase of leukaemia cells
act directly sympathomimetic with effects on alpha-adrenergic receptors
act directly sympathomimetic with effects on both beta-adrenergic receptors
Activates lymph node
Activates nerve
active
active against A-549, P-388 and L-1210 cells
active against germination
active against HeLa cells
active against strains

active against the enzyme reverse transcriptase
active against the H37Rv strain
active against unaffection usually by psoralen and other photosensitisers
active as a cardiac depressant
active as a transient hypotensive agent
active as a feeding deterrent
active as a histamine antagonist
active as a molluscicid
active as a molluscicidal agent
active as an antifeedant
active as an antijuvenile hormone
active as an insecticide synergist
active in vitro against the P-388 lymphocytic leukaemia cell line
activity against termites
activity and uses are similar to those of berberine
activity as a convulsant
activity as cardiac depressor
activity as uterine
activity on the uterus, resembling that of ergot
activity similar to that of linamarin
activity similar to that of neoeriocitrin
Acts against hepatic adipose infiltration
acute and subacute toxicity
acute cardiac infarction
Acute toxicity
acute toxicity at a relatively low dose, doses of 20 mg/kg cause a fall in blood pressure attributed to its ganglion-blocking properties
acute toxicity very close to that of aconitine
acutely toxic
addictive component of tobacco with tranquillising properties
Adenyl cyclase inhibitor
Adrenal cortex hormoneoid
Adrenaline alpha1- and alpha2-receptor agonist
adrenaline antagonist
adrenergic alpha-blocker
Adrenergic antagonist
adrenocorticotrophic
affect blood pressure
affect calcium mobilisation in vascular smooth muscle, inhibiting calcium release and extracellular influx
affect DNA binding
affect growing hair, and can become completely bald
affect heart rate

affect mitochondrial function
affect nervous system
affect prostaglandin induction
affect respiration
affect the central nervous system
affect the kidney and liver and have a delayed onset of action, at least 12 h after ingestion
against human superficial dermatomycosis
aggregation pheromones
alarm pheromone
Aldose reductase inhibitor
Algicidal
algicidal activity
Alkaline phosphatase promoter
allelopathic activity
allelopathic agent
allelopathic agent of *Juglans nigra*
allelopathic agent, inhibiting seed germination at a concentration of 0.05 mM
allelopathic effect
Allelopathic agent, produced from walnut tree *Juglans regia*
Allelopathy
Allergen
allergen in sawdust of *Thuja plicata*, causing asthma and rhinitis
allergen, causing skin irritations
allergen, causing the contact dermatitis together with 2,6-dimethoxybenzoquinone of *Acacia melanoxylon*
allergenic activity, cause contact allergic skin reactions
allergenic principle
allergenic properties
alpha-adrenergic blocking agent
alpha-glucosidase inhibitor
alpha-mannosidase inhibitor
ameliorates pain
amoebicidal
among the phenolics in millet grain responsible for the goitrogenic and antithyroid activity
AMV-reverse transcriptase inhibitor
an allelopathic agent
an anticonvulsant
an essential amino acid for children
an essential cofactor of plant metabolism
an essential fatty acid component of vitamin E
an essential ingredient of food diets
an ingredient of semi-drying oils as used in paints and coatings
anaesthetic activity

anaesthetic to cornea

Analgesic

analgesic action and duration of effect approach those of morphine and codeine

analgesic activity

analgesic agent

Analgesic, (+)Menthone shows strong action

Analgesic, acetic acid-induced writhing and hotplate method, in vivo

Analgesic, acetic acid-induced writhing model

Anesthetic

Angiogenesis inhibitor

Angiogenesis inhibitor inactive

anorexic

antagonistic to platelet activating factor

Anthelmintic

anthelmintic activity

anthelmintic activity in veterinary practice

anthelmintic in veterinary practice

Anti cancerous

Antiacne

Anti-adrenaline

anti-adrenergic

antiaggregation action on platelets in vitro

anti-algal activity

Antiallergic

anti-allergic activity

Antiallergic beta-Hexosaminidase inhibitor

Antialopecic

Antiamebic

anti-amoebic

anti-amoebic activities, attributed mainly to emetine

anti-amoebic activity

anti-amoebic compound used to treat dysentery

anti-amoebic drug for the treatment of dysentery

Antianaphylactic

anti-anaphylactic activity

anti-anaphylatic activity

Antiandrogenic

Anti-androgenic

Antianemic

anti-anxiety activity

anti-aphrodisiac properties

antiarrhythmic

anti-arrhythmic

antiarrhythmic activity
anti-arrhythmic activity
anti-arrhythmic agent
anti-arrhythmic of Fagara coco
Antiartherosclerotic
anti-arteriosclerotic activity
Antiarthritic
anti-arthritic
Antiasthmatic
anti-asthmatic activity
anti-atherosclerotic activity
antibacteria activity
Antibacterial
antibacterial activity
antibacterial activity in vitro
antibacterial activity, including plant pathogenic bacteria
antibacterial effect
Antibacterial inactive
Antibacterial, 15 strains of dysentery
Antibacterial, broad spectrum
Antibacterial, cooperates with berberine
Antibacterial, cytochrome C reductase inhibitor
Antibacterial, in vitro
Antibacterial, no explanation of bacterial species
Antibacterial, photo-activated antibacterial
Antibiotic
antibiotic activity
antibiotic activity, inhibiting synthesis
antibiotic properties
antibiotic property
Anticancer
anticancer activity
Anti-cancer activity
anticancer activity against Walker carcinosarcoma
anticancer activity when tested against lymphocytic P388 leukaemia, PS system and M5076 ovary sarcoma
Anticancer activity, degenerative diseases of the eye
anticancer activity, probably due to its inhibition of DNA and other protein synthesis, but has not yet proved useful clinically for treating advanced carcinomas
anticapillary fragility activity
Anti-Chagas' disease
anticholesteraeamic activity
anticholinergic

anticholinergic activity

anticholinergic with actions similar to but more potent than those of atropine, which is the racemate

anticholinergic, with both central and peripheral actions

anticholinesterase

anticholinesterase, with activity similar to but weaker than that of physostigmine

anticholinesterase, with activity similar to that of physostigmine

Anticoagulant

anticoagulant activity

anticoagulation activity

anticoagulative activity

Anticomplement activity

anticomplementary activity

Anti-complication of diabetes

Anticonvulsant

anticonvulsant activity

anticonvulsive activity

Anticoronary

antidepressant

antidepressant activity

antidepressant effect on the central nervous system

Antidiabetic

antidiabetic activity

Antidiarrheal

Anti-diuretic

Antidote

Antidote, alcohol and venom

Antieczemic

Anti-electroshock

Antiemetic

anti-emetic

anti-emetic activity

anti-emetic property

Antiestrogenic

antiestrogenic activity

antifeedant

antifeedant activity

antifeedant activity against larvae

antifeedant against the larva

antifeedant at a concentration of 0.005%

antifertility activity

Anti-fertility agent

antifertility effect

Antifibrinolytic
Antifibrotic
Antifungal
antifungal action
antifungal activity
antifungal activity (phytoalexin)
antifungal activity against Sarcoma 180
antifungal activity at a concentration of 0.05 microg/ml
antifungal agent
antifungal agent, phytoalexin
antifungal agent, with an ED50 of 50–75 p.p.m.
antifungal compound
antifungal effect
Antifungal inactive
antifungal property
antifungal property on needles of Pinus radiata
antifungal property, with an ED50 of 45 microM on spore germination
Antifungal, broad spectrum
Antifungal, in vitro
Antifungal, no description on fungi species
Antifungal, protects heartwood and bark
Antifungal, TLC
antigastric ulcer activity
antigonadotrophic activity
Anti-gonadotrophin
antigonadotropic
Antigranular
antihaemorrhagic
antihaemorrhagic activity
Antihemolysis inactive
Antihemolytic
Antihemolytic, AAPH-induced hemolysis of RBC
Antihemolytic, H2O2-induced hemolysis of RBC
Antihepatitis(type B) inactive
antihepatotoxic
antihepatotoxic activity
antihepatotoxic activity against phalloidin poisoning
antihepatotoxic activity in vitro
antihepatotoxic activity, but less strong than that of its chalcone isomer isobutrin
antihepatotoxic property
Antihepatotoxin
Antihistamine
antihistamine activity

Antihistaminic
antihistaminic activity
Anti-HIV activity
Anti-HIV inactive, H9 lymphocytes
Anti-HIV inactive, no explanation of HIV species
Anti-HIV, H9 lymphocytes
Anti-HIV, HIV-Rt inhibitor
Anti-HIV, inhibits cell denaturalization affected by HIV
Anti-HIV, inhibits cell formation of giant-cell without cytotoxicity
Anti-HIV, inhibits HIV in early stage of its cell cycle, inhibits the cell fusion and formation of plasmodia
Anti-HIV, inhibits HIV replication
Anti-HIV, inhibits HIV-induced formation of giant-cells
Anti-HIV, non-competitively inhibits enzymatic substrates
Anti-HIV-1
Anti-HIV-1 inactive
Anti-HIV-1 inactive, H9 lymphocytes
Anti-HIV-1 inactive, HIV-1 IN inhibitor inactive
Anti-HIV-1 inactive, HOG5 cells
Anti-HIV-1, binds to chemokine receptor CCR5
Anti-HIV-1, DDDP inhibitor
Anti-HIV-1, HIV-1 IN inhibitor
Anti-HIV-1, HIV-1 integrase inhibitor
Anti-HIV-1, HIV-1-induced cytopathic effect inhibitor
Anti-HIV-1, HIV-RT inhibitor
Anti-HIV-1, inhibits HIV-1 replication
Anti-HIV-1, MT-4 cells
Anti-HIV-1, RnaseH inhibitor
Antihypercholesterolemic
antihyperglycaemic activity
antihyperlipoproteinaemic agent
Antihypertensive
antihypertensive activity
antihypertensive drug
antihypertensive drug, profound in high dosages
antihypertensive, in clinical usage
Antihypertensive, no influence on heart
anti-implantation activity
Anti-infective
Antiinflammatory
anti-inflammatory
anti-inflammatory action
anti-inflammatory action is similar to that of aconitine

anti-inflammatory activity

anti-inflammatory activity, but much less than guaiazulene

anti-inflammatory agent

Anti-inflammatory inactive

Anti-inflammatory inactive, inhibiting COX-1 assay

Anti-inflammatory inactive, inhibiting COX-2 assay

anti-inflammatory property

Anti-inflammatory, 12-LOX inhibitor in hmn platelets, without affecting the levels of cyclooxygenase

Anti-inflammatory, 15-LOX inhibitor

Anti-inflammatory, 5-LOX inhibitor

Anti-inflammatory, activity matches with aspirin

Anti-inflammatory, antiarthritic

Anti-inflammatory, anti-edema

Anti-inflammatory, anti-inflammatory action in models of atherosclerosis, Alzheimer's disease, arthritis and pancreatitis; proposed mechanisms include macrophage activation inhibitor, lipoxygenase inhibitor, cyclooxygenase 2 inhibitor, and metabolite production via arachidonic acid pathways

Anti-inflammatory, arthritis model, induced by carrageenan, supresses recruitment of neutrophils

Anti-inflammatory, assay of dimethyl benzene-induced inflammation

Anti-inflammatory, assay of dimethyl benzene-induced inflammation

Anti-inflammatory, blocks NO production and NOS activity and expression

Anti-inflammatory, chronic arthritis

Anti-inflammatory, COX-1 inhibitor

Anti-inflammatory, COX-2 inhibitor

Anti-inflammatory, COX-2 inhibitor inactive

Anti-inflammatory, COX-2 inhibitor, inhibits expression of COX-2

Anti-inflammatory, COX-2 inhibitor, to renal medulla

Anti-inflammatory, cytokine formation inhibitor, hmn peripheral blood mononuclear cells, TNF-alpha, IL-4, IL-2 and IFN-gamma

Anti-inflammatory, cytokine formation inhibitor, RAW264.7 cells, TNF-alpha and IL-6

Anti-inflammatory, ear edema, both PMA and oxazolone-induced

Anti-inflammatory, ear edema, induced by TPA

Anti-inflammatory, ear edema, prevents ear edema formation caused by PMA and synthesis of LOX products, especially LTC4 and COX metabolites derived from arachidonic acid

Anti-inflammatory, eczema in mouse ears, repeated administration of TPA

Anti-inflammatory, formaldehyde edema model

Anti-inflammatory, gpg ear edema, induced by benzoic acid

Anti-inflammatory, gpg, erythema reaction from ultraviolet irradiation

Anti-inflammatory, ICAM-1 expression inhibitor, PMA-induced

Anti-inflammatory, IL-12 production inhibitor

Anti-inflammatory, IL-12 production inhibitor, macrophages, LPS-activated

Anti-inflammatory, IL-1beta production inhibitor, hmn monocyte, LPS-stimulated

Anti-inflammatory, IL-5 inhibitor

anti-inflammatory, in several experimental models of inflammation

Anti-inflammatory, increases TNF-alpha level in RAW264.7 cells

Anti-inflammatory, inflammation caused by TPA

Anti-inflammatory, inhibits activation of IL-12 gene promoter

Anti-inflammatory, inhibits activation of NF-kappaB, PMA- and TNF-alpha-induced, mechanism not involving antioxidant pathways

Anti-inflammatory, inhibits binding of several chemokines, such as CXC, CC to hmn leucocytes or cells transfected with chemokine receptors

Anti-inflammatory, inhibits expression and production of pro-inflammatory cytokines(IL-1beta, IL-6, TNF-alpha, IFN-gamma, MIP-1alpha/beta) hmn peripheral blood mononuclear cells under stimulation with superantigenic staphylococcal exotoxins

Anti-inflammatory, inhibits expression of iNOS

Anti-inflammatory, inhibits lipid peroxidation, cephalopin

Anti-inflammatory, inhibits LPS-induced DNA binding activity of NF-kappaB, associated with decrease of p65 protein levels in nucleus

Anti-inflammatory, inhibits LTB4 biosynthesis

Anti-inflammatory, inhibits metabolism of arachidonic acid

Anti-inflammatory, inhibits mRNA expression and production of TNF-alpha or IL-6 in RAW264.7 cells

Anti-inflammatory, inhibits not only expression of inflammatory NF-kappaB target genes such as iNOS, COX-2 and TNF-alpha but also production of PGE2 and TNF-alpha

Anti-inflammatory, inhibits poroplast permeability

Anti-inflammatory, inhibits production of PGE2, C6 rat glioma cells

Anti-inflammatory, inhibits production of pro-inflammatory cytokines(TNF-alpha and IL-1beta), hmn monocytes and macrophages

Anti-inflammatory, inhibits protein and mRNA expression levels of iNOS and COX-2 enzymes

Anti-inflammatory, inhibits release and metabolism of arachidonic acid

Anti-inflammatory, inhibits vaso-permeability

Anti-inflammatory, lead compound to develop new anti-inflammatory drugs

Anti-inflammatory, lead compound to treat asthma

Anti-inflammatory, leucocyte elastase MMP-2/9 inhibitor

Anti-inflammatory, may be useful for the treatment of various inflammatory diseases

Anti-inflammatory, modified Tan and Berridge method

Anti-inflammatory, modulator of cytokine network

Anti-inflammatory, myeloperoxidase inhibitor

Anti-inflammatory, NF-kappaB inhibitor

Anti-inflammatory, NF-kappaB inhibitor, LPS-induced, RAW264.7 cells

Anti-inflammatory, NF-kappaB pathway

Anti-inflammatory, no detail information

Anti-inflammatory, paw edema model, induced by 5-HT

Anti-inflammatory, paw edema model, induced by carrageenan

Anti-inflammatory, paw edema model, induced by glucosan
Anti-inflammatory, paw edema model, induced by histamine
Anti-inflammatory, paw edema model, induced by phospholipase A2
Anti-inflammatory, PGE2 production inhibitor
Anti-inflammatory, PGE2 production inhibitor, LPS-induced, RAW264.7 cells
Anti-inflammatory, prevents TNF-alpha and IL-6 production in RBL-2H3 stimulated mast cells, through a mechanism involving the blockade of NF-kappaB activation
Anti-inflammatory, reduces ICAM-1 expression, in liver cells, LPS-stimulated
Anti-inflammatory, reduces leucocyte infiltration, measured as tissue peroxidase activity
Anti-inflammatory, specific NF-kappaB inhibitor of DNA-binding activity of p50 subunit
Anti-inflammatory, subcutaneous granuloma model
Anti-inflammatory, tampon granuloma model
Anti-inflammatory, TNF-alpha production inhibitor
Anti-inflammatory, TNF-alpha production inhibitor, LPS-induced, RAW264.7 cells
Anti-inflammatory, TNF-alpha production inhibitor, LPS-induced, U937 cells
Anti-inflammatory, treatment of cervicitis
Anti-inflammatory, tuberculin reaction model
Anti-inflammatory, woolball model
Antileishmanial
Antileprotic
antileukaemia activity
antileukaemic activity
anti-leukaemic activity
antileukaemic activity against KB cell lines
antileukaemic agent
antileukaemic effects in vitro
antileukaemic in vivo, P-388 lymphocytic leukaemia
antilipase activity
Antilipidemic activity
Antimalarial
antimalarial activity
antimalarial activity in vivo
antimalarial activity, a resolving agent
Antimalarial inactive
antimalarial property
Antimalarial, no detail information
Antimelancholic
Antimenorrhagic
antimetabolic activity
Antimicrobial
antimicrobial
antimicrobial action
antimicrobial activities

antimicrobial activity
Anti-microbial activity
antimicrobial activity against plant pathogens
antimicrobial activity in vitro
Antimicrobial activity towards the tested microorganisms
antimicrobial activity, but weaker than that of sanggenon C
antimicrobial, active in vivo
antimimetic activity
Antimitotic
antimitotic activity
Antimitotic and antifungal
anti-moth activity
antimuscarinic effects on isolated intestinal muscle
Antimutagenic
antimutagenic activity
antimycotic activity
antineoplastic
antineoplastic activity
antineoplastic activity to P388 leukaemia in vitro
antineoplastic agent
Antineoplastic inactive, KB, LNCaP, Lu1 and P388
Antineoplastic, 10 of 60 tested flavones show antineoplastic activity, isovitexin was one of the strongest three compounds
Antineoplastic, 3PS leukemia
Antineoplastic, 755 adenocarcinoma
Antineoplastic, A549
Antineoplastic, antitumor promoter
Antineoplastic, ascites hepatoma
Antineoplastic, B16
Antineoplastic, bladder carcinoma
Antineoplastic, breast cancer
Antineoplastic, cardiac sinus cancer
Antineoplastic, cervical carcinoma
Antineoplastic, chorion cell carcinoma
Antineoplastic, clinical trial, given orl to 558 patients with cancer of lung and esophagus, or with superficial metastatic cancer during radiotherapy
Antineoplastic, Co115 cancer
Antineoplastic, colorectal cancer
Antineoplastic, decuduoma caused by luteosterone
Antineoplastic, EAC
Antineoplastic, EBV-EA activation inhibitor
Antineoplastic, EBV-EA activation inhibitor, TPA-induced
Antineoplastic, Ehrlich ascites carcinoma(EAC)

Antineoplastic, HAC cancer
Antineoplastic, HeLa
Antineoplastic, HeLa, inhibits proliferation of cells
Antineoplastic, horrow fiber assay
Antineoplastic, HT29
Antineoplastic, hysteromyoma
Antineoplastic, induces myelocytic leukemia M1 cell differentiation
Antineoplastic, inhibits 32P combines with phospholipid in HeLa cells
Antineoplastic, inhibits DNA synthesis
Antineoplastic, inhibits formation of melanin
Antineoplastic, inhibits melanoma lung metastasis
Antineoplastic, inhibits RNA synthesis
Antineoplastic, KB
Antineoplastic, Kichita sarcoma
Antineoplastic, L1210 Lymphocytic leukemia
Antineoplastic, L1712 leukemia
Antineoplastic, leukemia
Antineoplastic, leukemia, acute
Antineoplastic, Lewis lung cancer
Antineoplastic, liver cancer
Antineoplastic, LLC
Antineoplastic, LNCaP
Antineoplastic, lung cancer
Antineoplastic, lung cancer, essential or caused by urethan
Antineoplastic, lymphatic dyscrasia
Antineoplastic, lymphatic sarcoma
Antineoplastic, MCF7
Antineoplastic, melanoma
Antineoplastic, no description on tumor types
Antineoplastic, Oberling–Guerin transplanting myeloma
Antineoplastic, P1534 leukemia
Antineoplastic, P388
Antineoplastic, p53-deficient hmn head and neck squamous cell carcinoma SQ-20B
Antineoplastic, papillary carcinoma
Antineoplastic, prevents new vessel formation
Antineoplastic, pulmonary adenoma
Antineoplastic, pulmonary adenoma caused by nitroso compound
Antineoplastic, Radi cells
Antineoplastic, radioresistant and chemoresistant
Antineoplastic, RS188N(rad+) mutant yeast *Saccharomyces cerevisiae*
Antineoplastic, RS321 mutant yeast *Saccharomyces cerevisiae*
Antineoplastic, RS52YK(rad52Y) mutant yeast *Saccharomyces cerevisiae*
Antineoplastic, S180 sarcoma

Antineoplastic, S37 sarcoma
Antineoplastic, screened as potential antitumor promoters
Antineoplastic, skin cancer
Antineoplastic, SN36 leukemia
Antineoplastic, squamosal carcinoma in skin
Antineoplastic, stomach tumor
Antineoplastic, SWA16
Antineoplastic, thyracoid carcinoma
Antineoplastic, transplant tumors
Antineoplastic, treatment of granulocytic leukemia
Antineoplastic, treatment of skin cancer
Antineoplastic, tubulin assay
Antineoplastic, tumor due to SV40 virus
Antineoplastic, tumor xenograft
Antineoplastic, U14 cervical carcinoma
Antineoplastic, W256 Walker sarcoma
Antineoplastic, yeast bioassay for DNA-modifying agents
Antinociception
anti-oedemic activity
antioestrogenic activity
Antiosteoclastogenic activities
Antioxidant
anti-oxidant
antioxidant activity
anti-oxidant activity
antioxidant agent
Antioxidant and free radical-scaveging actions
Antioxidant and may have protective properties againts certain forms of cancer and casdiovascular diseases
Antioxidant and the antioxidative capability of chlorogenic
antioxidant efficiency in the erythrocyte membrane ghost system
Antioxidant inactive, assay on AAPH-induced hemolysis of RBC
Antioxidant inactive, Cytochrome-C reduction
Antioxidant inactive, DCFH method, HL-60cells
Antioxidant inactive, DPPH scavenger inactive
Antioxidant inactive, DPPH scavenger inactive, TLC
Antioxidant inactive, feruric thiocyanate method
Antioxidant inactive, FMLP-induced and OZ-induced oxidative burst
Antioxidant inactive, H2O2/horseradish peroxidase assay
Antioxidant inactive, lipid peroxide inhibitory experiment(deleted), hepatic homogenate, caused by FeSO4
Antioxidant inactive, lipid peroxide inhibitory experiment(hepatic homogenate, caused by H2O2)
Antioxidant inactive, lipid peroxide inhibitory experiment(rat liver microsomes)

Antioxidant inactive, PMN cellular chemiluminescence assay

Antioxidant inactive, PMN cellular chemiluminescence assay, reduces oxidative burst FMLP-induced

Antioxidant inactive, superoxide anion generation, fMLP/CB method

Antioxidant inactive, superoxide anion radical scavenging assay

Antioxidant inactive, superoxide anion radical scavenging assay, superoxide dismutase method

Antioxidant inactive, superoxide radical scavenging assay

antioxidant property

Antioxidant, chemiluminescence method

Antioxidant, Cytochrome-C reduction

Antioxidant, DCFH method, HL-60 cells

Antioxidant, DPPH scavenger

Antioxidant, DPPH scavenger, in vitro

Antioxidant, DPPH scavenger, TLC

Antioxidant, ferric thiocyanate method

Antioxidant, free radical scavenger, no description on type of free radical

Antioxidant, free-radical induced lysis of RBC

Antioxidant, H₂O₂/horseradish peroxidase assay

Antioxidant, hydroxyl radical scavenger

Antioxidant, inhibits formation of active oxygen

Antioxidant, inhibits lipid peroxidation in brain homogenate

Antioxidant, inhibits lipid peroxidation in cytoblast in liver cells

Antioxidant, inhibits lipid peroxidation in hepatic homogenate, caused by H₂O₂

Antioxidant, inhibits lipid peroxidation in hepatocyte membrane, effects on Fe³⁺/ascorbate-induced lipid peroxidation

Antioxidant, inhibits lipid peroxidation in liver

Antioxidant, inhibits lipid peroxidation in microsome of hepatocyte

Antioxidant, inhibits lipid peroxidation in mitochondria of hepatocyte

Antioxidant, inhibits lipid peroxidation in mitochondria of hepatocyte, FeSO₄-induced

Antioxidant, inhibits lipid peroxidation, adriamycin-induced

Antioxidant, inhibits lipid peroxidation, cephalopin

Antioxidant, inhibits lipid peroxidation, effects on plasma oxidation after incubation with Fe²⁺/H₂O₂

Antioxidant, inhibits lipid peroxidation, induced by vitamin C-nicotinamide ADP and Fe²⁺ - cysteine in microsome of murine cerebral(hepatic and renal cells)

Antioxidant, inhibits lipid peroxidation, no description on target tissue and method

Antioxidant, inhibits malondialdehyde(MDA)

Antioxidant, inhibits t-BuOOH induced luminescence

Antioxidant, iron chelating assay

Antioxidant, LDL peroxidation inhibitor

Antioxidant, LDL peroxidation inhibitor, Cu²⁺ -induced

Antioxidant, LDL peroxidation inhibitor, Cu²⁺ -induced and AAPH-induced

Antioxidant, lipid peroxidation assay, enzyme-dependent
Antioxidant, lipid peroxidation assay, enzyme-independent
Antioxidant, no description on experimental method
Antioxidant, PEP inhibitor
Antioxidant, peroxide formed from polymorph
Antioxidant, PMN cellular chemiluminescence assay
Antioxidant, reduces oxidative burst FMLP-induced
Antioxidant, SOD-like activity
Antioxidant, superoxide anion radical scavenger
Antioxidant, superoxide anion radical scavenger, cytochrome C assay
Antioxidant, superoxide anion radical scavenger, superoxide dismutase method
Antioxidant, superoxide radical scavenger
Antioxidant, up-regulates 50 genes and down-regulates many others
Antioxidative properties
antipeptic activity
antiperoxidative activity
antiperoxydative activity
Anti-phase
antiphlogistic activity
antiplatelet activity, causing 50% of platelet aggregation in the presence of arachidonic acid at a concentration of 0.5 microM
antiplatelet aggregation activity
Antiplatelet aggregation and vasorelaxing activity
antiproliferative activity in a human cell line from adenocarcinoma of the ascending colon
anti-promotion activity in carcinogenesis
Antiprostatic
Antiprotozoal
antiprotozoal activity in vitro
antiprotozoal agent, active at a dose of 200 mg/kg body-weight in *Mus musculus*
antiprotozoal agent, capable of inhibiting a multi-drug resistant strain with an LC50 of 150 mg/ml
Antipyretic
antipyretic activity
antipyretic in veterinary practice
Antipyretic mechanism involves inhibition of PG synthesis in brain
antipyruvetic
antiretroviral activity in vitro and in vivo
Antiretroviral and cytotoxic
Antirheumatic
antischistosomal activity
Antischistosomal effect
antiseborrhoeic agent
antisecretory for saliva

Anti-sepsis

Anti-sepsis inactive

Antiseptic

antiseptic action

antiseptic activity

antiseptic activity, 1.5 times stronger than phenol

antiseptic activity, 7 times stronger than phenol

antiseptic agent in veterinary practice

antiseptic, 1.5 times the activity of phenol

antiseptic, 20 times more active than phenol

antiseptic, five times stronger than phenol

Antiserotonic

antisickling activity

Antispasmodic

antispasmodic activity

antispasmodic agent

antispasmodic property

Antispirochetic

Anti-sweetener

Antisyncopic

antitermite activity

Antithrombotic

antithrombotic activity

Antitoxin

Anti-Trichomonas vaginalis

Antitrypanosomal

antitrypanosomal agent

antitrypanosomal epimastigotes in vitro

antitrypanosomal in vitro

Antitrypanosomal inactive

antitubercular activity in vitro

Antituberculosis

antituberculostatic activity, inhibiting at a concentration of 0.2 mg/ml in vitro

antitubulin activity

Anti-tumor

antitumor activity

antitumor activity against Yoshida sarcoma and P-388 leuchemia

Antitumor promotion

antitumour

antitumour (Walker Sarcoma) activity

antitumour activity

antitumour activity against ascites lymphoma

antitumour activity against HeLa-cells, blocking DNA synthesis

antitumour activity against Sarcoma 180
antitumour activity against Sarcoma 180 ascite
antitumour activity against Sarcoma 180 ascites
antitumour activity against Walker 256 carcinosarcome
antitumour activity in leukaemia assays with P-388 and KB-systems
antitumour activity in the Walker 256 tumour cell system

antitumour activity in vivo, probably due to the two diterpenoid alkaloids, ovatine and lindheimerine

antitumour activity, in widespread clinical usage, especially to treat certain types of leukaemia and Hodgkin's disease

antitumour agent
antitumour agent used particularly for acute lymphocytic leukaemia in childhood
antitumour properties
antitumour properties, but too toxic for clinical use
Antitussive
antitussive activity
antitussive like codeine, but with no analgesic activity
Antitussive, dispels phlegm
anti-ulcer activity
anti-ulcer activity in vitro
Anti-ulceration
Antiulcerative
antiulcerogenic activity
anti-ulcerogenic activity
Anti-venom
Antiviral
antiviral activity
antiviral activity against herpes simplex I
antiviral activity against measles

antiviral activity, probably due to its inhibition of DNA and other protein synthesis, but has not yet proved useful clinically for treating advanced carcinomas

antiviral effect
Antiviral inactive
antiviral phototoxicity
antiviral property
Antiviral, hmn coronavirus strain 229E, HCoV-229E
Antiviral, inhibits biosynthesis of RNA
Antiviral, inhibits replication of HSV-1
Antiviral, no explanation of virus species
antiyeast activity
Aphrodisiac
APN inhibitor inactive
apply topically to chilblains and similar conditions

approved acidulant

approved flavouring agent

approved food stabiliser

aqueous solutions are used as a topical anaesthetic

Arachidonic acid oxidase inhibitor

Aromatase inhibitor

Aromatase inhibitor inactive

as a sunscreen

as the coenzyme A ester, biosynthetic precursor of hydroxycinnamic acid and other phenylpropanoids

associate with carbohydrate metabolisms by combining with pyrophosphoric acid to produce co-carboxylase

associated with flower pollination

associated with photosynthetic and respiratory pathways

Astringent

astringent property

at naturally concentrations, first-instar development of larvae are prolonged, but fourth-instar growth rates are reduced

atropine-like properties in bulb extract

Attenuates the colonic damage activities

attract and stimulate egg laying

attract the male adults

Attracted numerous ladybird beetles

Attracted to compounds comprising a large proportion of the blend that makes up fruity Protea scents

attracting pollinators

attractive flavour

augments the hypertensive effects of adrenaline

Bacterial CO₂ production promotes plant growth

bactericidal

bactericidal activity

bactericidal activity against dental caries

bactericidal activity, above 5% concentration

bacteriostatic activity

base for synthesising other steroids

BChE inhibitor

behave much like abscisic acid

behave much like indole auxin

believed to possess antitumour activity

Benzodiazepine receptor antagonist

Bidirectional action to blood pressure, first increases and then lowers blood pressure, while heart rate shows

Bidirectional action to CNS system, first stimulation and then inhibition
Bidirectional action to drowsiness, excitation in low dose and inhibition in high dose
Bidirectional action to heart, first stimulates and then inhibits
Bidirectional action to heart, inhibits first and then stimulates
Bile secretion promoter
Binding activity to benzodiazepine receptor
biological precursor of the catecholamines
Biosynthesis of DNA, protein and lipid promoter
Biosynthesis of rRNA and mRNA promoter
biphasic activity profile
bitter principles of gentians, which are used as bitter tonics
bitter taste
bitter tasting , although it doesn't yield cyanide on enzymatic hydrolysis as do other cyanogenic glycosides
bitter tasting, 1/5 as bitter as quinine
bitter-sweet taste
bitter-tasting
Blood and lymph diseases (Hepatic encephalopathy)
Blood pressure lowering activity
blue flower pigment
blue pigment
blurred vision contraction of pupil
Bone marrow cell proliferation promoter
Bone resorption inhibitor
Bovine tuberculosis (Zoonotic pathogen)
brachycardiac activity
breathing difficulties, LD50 intravenously 0.23 mg/kg
broad antimicrobial activity
broad antitumour activity
broad spectrum antimicrobial activity
bronchial inhalant
bronchodilator
bronchodilatory activity
buds of *Magnolia salicifolia* are used as a medicine for nasal allergy
buds of *Magnolia salicifolia* are used as a medicine for nasal empyema
Calcium antagonist
calcium antagonistic activity affecting cardiac disorders
calcium antagonistic activity affecting hypertension
calcium antagonistic activity on taenia
calcium antagonistic activity on taenia coli
Calmodulin-dependent cAMP phosphodiesterase inhibitor
CaM interactor
cAMP phosphodiesterase inhibitor

can be fatal at large doses
can be irritating to, and absorbed through, the skin
can cause allergic reactions
can cause ataxia
can cause delirium
can cause kidney damage
can cause severe allergic dermatitis
can cause skin eruption
can detonate violently at room temperature
can irritate gastric mucosa
cancer chemopreventive potential
cancer prevention activity
Cancer-Preventive
Cancers (Advanced breast cancer)
Cancers (Advanced head-and-neck cancer)
Cancers (Breast cancer)
Cancers (Cancer wounds)
Cancers (Colorectal cancer)
Cancers (Lung cancer)
Cancers (Malignant head and neck tumors)
Cancers (Melanoma)
Cancers (Stomach cancer)
contact allergen
Capillary, enhances capillary permeability
Capillary, improves barrier of microcirculation
Capillary, improves osmosis of capillary
Capillary, inhibits increase of blood capillary permeability
Capillary, reduces blood capillary brittleness
Capparis plants are widely used in the treatment of rheumatism
Carcinogen
Carcinogen promoter
Carcinogen, causes hepatic cancer
carcinogenic
carcinogenic activity
carcinogenic to liver, skin, and intestine
carcinogenic, possibly
cardiac action
cardiac stimulant
Cardiotonic
cardiotonic activity
cardiotonic agent
cardiotonic agent, inducing tachycardia
cardiotoxic

cardiovascular activity

Cardiovascular activity, antiarrhythmic

Cardiovascular activity, anti-arteriosclerosis

Cardiovascular activity, anti-ischemia myocardial

Cardiovascular activity, contracts blood vessels, increases blood pressure and stimulates heart

Cardiovascular activity, electrocardiogram changed

Cardiovascular activity, enhances collateral circulation and oxygen consumption upon lack of blood in myocardium

Cardiovascular activity, improves myocardium metabolism and promotes restration of myocardial function

Cardiovascular activity, increases coronary flow

Cardiovascular activity, increases coronary flow and cerebral blood flow

Cardiovascular activity, induces myocardial rhythm

Cardiovascular activity, inhibits cardiac contraction, causes a prolongation of the latency time and decrease of contraction force

Cardiovascular activity, inhibits content of free radicals in myocardiac cells

Cardiovascular activity, inhibits contraction of auricular smooth muscle

Cardiovascular activity, inhibits damage of myocardial cells caused by free radicals

Cardiovascular activity, inhibits myocardial automatic rhythmicity and contractile power

Cardiovascular activity, inhibits myocardial contractility

Cardiovascular activity, reduces consumption of oxygen in myocardium

Cardiovascular activity, slows heart rate

Cardiovascular activity, stimulates heart

carminative

carminative action

carmine pigment

cataleptic at high doses

Cataractagenic

Catechol- α -methyltransferase inhibitor

cathartic

cathartic activity

causative agent of nephropathy

cause a sudden fall in blood pressure when given intravenously in doses of 2–5 mg/kg

cause abdominal pain

cause acute kidney malfunction and possible blocking of urine flow

cause allergic skin reactions

cause an increase in the peristalsis of the small intestine

cause antifertility at nontoxic dosages

cause ataxia

cause autonomic effects such as hypertension and pupillary dilatation

cause blindness and poisoning by consumption of the fruits of *Rhodomyrtus*, but no verification that this compound is responsible

cause blurred vision

cause brown necrosis lesions on punctured leaves

cause cardiac depression

cause cardiovascular effects, including brief lowering of the blood pressure and disturbed respiration

cause catalepsy effect

cause central nervous system depression followed by stimulation

cause chronic ammonia toxicity

cause cleft palate and dwarfism in foetuses

cause contact allergies

cause contraction of the ileum

cause convulsions

cause convulsions and weakness of the hind limbs

cause convulsions at high doses

cause convulsions at large doses

cause damage to pulmonary vascular tissue but without hepatotoxicity

cause degenerative midgut lesions

cause delirium

cause dermatitis

cause development aberrations in embryos due to competitive inhibition of proline uptake and incorporation, with particular reference to collagen synthesis

cause diarrhoea

cause disruption of later stages of spermatogenesis

cause excitation

cause excitement

cause facial eczema by grazing

cause fatal veno-occlusive disease

cause gastroenteritis about 2–6 hours after eating, with vomiting, abdominal cramps, lassitude, headache, cyanosis, jaundice, convulsions and coma, by hydrolysis

cause glaucoma at high doses over a prolonged period

cause glycosuria by interfering with the tubular reabsorption of glucose in the kidney

cause grazing toxicity

cause haemorrhagic disorders and even death by eating *Melilotus officinalis* containing dicoumarol

cause immobilisation of spermatozoa

cause impairment of DNA synthesis in combination with UV

cause impairment of DNA synthesis in the presence of ultraviolet light

cause intoxication, probably result of another alkaloid, calycanthine

cause lesions in liver and kidney, leading to death

cause liver and kidney damage

cause liver damage

cause loss of colour due to the destruction of the chloroplasts, when applied

cause motor paralysis

cause nausea

cause nausea, flushing and breathing difficulties if alcohol is consumed after eating the mushroom, similar to the disulfiram reaction used to discourage alcoholics from drinking, caused by interference with alcohol metabolism, causing accumulation of acetaldehyde in the blood

cause necrosis

cause necrotic lesions in the leaf at a concentration of 5×10^{-3} M

cause necrotic lesions on pods or leaves, at a concentration of 3×10^{-2} M

cause necrotic symptoms when applied at a concentration of 6.2×10^{-4} mol/dm⁻³

cause neurolethargy in a similar way to alpha-amino-beta-oxalylaminopropionic acid

cause neurolethargy, a neurotoxic syndrome, may be permanent and death may occur, characterized by paralysis of the legs and, occasionally, the arms, bladder and bowel

cause other mental effects including anxiety and perceptual disturbances

cause paralysis

cause paralysis of respiratory organs

cause paralysis of the central nervous system

cause respiratory arrest in relatively small doses

cause respiratory paralysis

cause sedative effect

cause significant mitogenic activation of splenic lymphocytes, characteristic of immunostimulants

cause skin rashes in sensitive people

cause spasms at large doses

cause subepidermal blistering of skin

cause substantial and lasting depression of blood pressure, comparable with reserpine

cause suppressed salivation

cause the acute selenium poisoning known as blind staggers

cause the death of 83% of the offspring, when fed at the rate of 10 mg/kg body-weight each day to female during gestation

cause tremors

cause tremors and weakness of the hind limbs

cause uterine contractions

cause vasoconstriction

cause vasodilation

cause violent convulsions

cause vomiting

Causes abortion

Causes arrhythmia

Causes bleeding

Causes contact dermatitis

Causes convulsion and paralysis

Causes glucopenia and vomiting sickness

Causes hypoglycemia

Causes liver injury

Causes mental illness
Causes methemoglobin disease
causing contact allergy
causing growth-inhibitory activity
causing nausea
causing slowing of the heart rate
causing wakefulness
Cell division arrester
Cell growth inhibitor
Cell viability
central nervous system activity
central nervous system depressant
central nervous system depressant (sedative)
central nervous system depressant activity
central nervous system depressant in high doses
central nervous system excitatory agent
central nervous system stimulant
central nervous system stimulant with strychnine-like activity
central nervous system stimulant, resembling strychnine, but less toxic
central nervous system toxicity
cerebral vasodilator
Chemical attractant for *Ae. aegypti*
Chemical attractant for *Glossina* spp.
chemically used as a precursor in the manufacture of anisaldehyde
chemosterilant
Choleretic
choleretic activity
choleretic property
Cholineoid action
cholinergic
cholinergic activity
Cholinesterase inhibitor
chronic absorption may cause albuminuria and haematuria
Chymotrypsin inhibitor
clastogenic activity
clinically active against forms of dermatitis
Cneorum is used as a rubefacient
Cneorum is used as antifebrifuge
Cneorum plants are used as a rubefacient
Cneorum plants are used as an antifebrifuge
CNS active
CNS depressant
CNS -depressant

Coagulant

coating and/or excipient for tablets

coconut flavour principle

coenzyme for carboxylation during metabolism of proteins and carbohydrates

co-enzyme, vitamin, converted in the body to pyridoxal phosphate, which is the co-enzyme for amino acid decarboxylase and transaminase

Collagenase inhibitor

colourless precursor of the dark blue indigo

Comedolytic

competitively inhibit peroxidase activity

component in some lubricating greases, waxes and plastics

component of co-enzyme A

component of dietary amino acid

component of folic acid and B complex vitamins

component of intermediate metabolism

component of normal metabolism

component of the antimicrobially active fraction of *Dittrichia viscosa*

concerned with growth regulation

congestion of pulmonary circulation

constituent of arrow poisons for hunting

constituent of cytovaricin

constituent of homogluthathione

contact oviposition stimulant for laying eggs on Citrus leaves

contact sensitising (allergenic) potency

contact sensitising (allergic) properties

Contraceptive

contribute to the bitter taste of beer

contribute to the more effective pollination of flowers by making the moths drowsy

contribute to the odour of *Aquillaria* when it is burned as incense

contribute to the unripe sourness

contributes significantly to flavour, together with breakdown products formed during cooking

contributes significantly to odour, together with breakdown products formed during cooking

control circadian rhythm

control drought resistance

control stomatal closure

control the dormancy of fruit

Controls growth

Convulsant

convulsant action

convulsant property

convulsions, and may lead to death

convulsive

convulsive agent

convulsive poison

co-occur with other toxins (nitro compounds) but could contribute to the emaciation by grazing on Astragalus

co-occur with the 6-epimer, prosopphylline, which is present as the racemate

co-occur with the closely related delvaine B, which is equally poisonous

co-pigment to delphinidin 3-(6''-malonylglucoside) which in the presence of iron(II)

coronary activity

coronary dilating activity

coronary vasodilatory activity

corrosive to the skin

could be used in the pharmaceutical industry for the production of therapeutically active substances

coumarin glycoside

counter-irritant

crystallize out of the urine if sufficient of the Fabaceae is eaten

culminating in death preceded by violent convulsions

cumulative poison over short periods

curare substitutes

curare-like action at large doses

curare-like neuromuscular blocker

curare-like neuromuscular blocking agent

Curariform action

Curtails the time of bleeding

Curtails the time of blood clotting

Cyclooxygenase inhibitor

CYP2D6 inhibitor inactive

CYP3A4 inhibitor

CYP3A4 inhibitor and CYP2D6 inhibitor

CYP3A4 inhibitor inactive

Cytochrome CyP1A inhibitor

Cytochrome P450(CYP3A4) inducer

cytostatic activity

cytostatic activity in lymphoma cell systems

cytotoxic

cytotoxic activity

cytotoxic activity against KB cell lines

cytotoxic activity against microphages at higher dosage

cytotoxic activity against P-815 and P-388 tumour cells in vitro, thus inhibiting tumour growth

cytotoxic activity against T- and B-lymphocytes at higher dosage

cytotoxic activity against Walker-256 carcino-sarcoma-ascites cells

cytotoxic against Ehrlich ascites carcinoma cells at higher doses

cytotoxic against HeLa cells

cytotoxic against leukaemia L-5178Y cells and the KB cell system in vitro

cytotoxic agent
cytotoxic and antileukaemic activity against PS-cells in culture
cytotoxic at high doses
cytotoxic effect
cytotoxic in cell culture experiment
cytotoxic in the human KB tissue culture assay
cytotoxic in the P388-test
cytotoxic in vitro
cytotoxic in vitro, KB-human epidermoid carcinoma of nasopharynx
Cytotoxic inactive, 1A9
Cytotoxic inactive, 3LL
Cytotoxic inactive, A2780 cells
Cytotoxic inactive, A375 cells
Cytotoxic inactive, A549 cells
Cytotoxic inactive, AGS cells
Cytotoxic inactive, assay to screen for inhibitors of cell division
Cytotoxic inactive, BC cells
Cytotoxic inactive, BC-1 cells
Cytotoxic inactive, BCA-1 cells
Cytotoxic inactive, Bcap37 cells
Cytotoxic inactive, Bel7402 cells
Cytotoxic inactive, Bel7405 cells
Cytotoxic inactive, BGC823 cells
Cytotoxic inactive, BL6 cells
Cytotoxic inactive, Bowes cells
Cytotoxic inactive, Bre04 cells
Cytotoxic inactive, BST assay
Cytotoxic inactive, BT474 cells
Cytotoxic inactive, BT549 cells
Cytotoxic inactive, BXP3 cells
Cytotoxic inactive, CAKI cells
Cytotoxic inactive, Calu1 cells
Cytotoxic inactive, Capan2 cells
Cytotoxic inactive, CCM2 cells
Cytotoxic inactive, CHAGO cells
Cytotoxic inactive, Col2 cells
Cytotoxic inactive, Colon205 cells
Cytotoxic inactive, Colon205-L5 cells
Cytotoxic inactive, COS-7 cells
Cytotoxic inactive, DU145 cells
Cytotoxic inactive, EAC cells
Cytotoxic inactive, for normal hmn gingival fibroblasts HGF
Cytotoxic inactive, HCT116 cells

Cytotoxic inactive, HCT15 cells
Cytotoxic inactive, HCT8 cells
Cytotoxic inactive, HeLa cells
Cytotoxic inactive, HeLa-S3 cells
Cytotoxic inactive, HEP2 cells
Cytotoxic inactive, Hep3B cells
Cytotoxic inactive, Hepa cells
Cytotoxic inactive, HEPA59T/VGH cells
Cytotoxic inactive, HepG cells
Cytotoxic inactive, HepG2 cells
Cytotoxic inactive, HGF cells
Cytotoxic inactive, HL-60 cells
Cytotoxic inactive, HM02 cells
Cytotoxic inactive, HO-8910 cells
Cytotoxic inactive, HONE-1 cells
Cytotoxic inactive, HSC-2 cells
Cytotoxic inactive, HSG cells
Cytotoxic inactive, HT1080 cells
Cytotoxic inactive, HT29 cells
Cytotoxic inactive, hTERT-RPE1 cells
Cytotoxic inactive, HUVEC cells
Cytotoxic inactive, Jurkat-T cells
Cytotoxic inactive, K562 cells
Cytotoxic inactive, Kato3 cells
Cytotoxic inactive, KB cells
Cytotoxic inactive, KB16 cells
Cytotoxic inactive, KB-VI cells
Cytotoxic inactive, KB-VIN cells
Cytotoxic inactive, L1210 cells
Cytotoxic inactive, L6(=L-6) cells
Cytotoxic inactive, L-929 cells
Cytotoxic inactive, LLC cells
Cytotoxic inactive, LNCaP cells
Cytotoxic inactive, LNCaP-FGC cells
Cytotoxic inactive, Lu04 cells
Cytotoxic inactive, Lu1 cells
Cytotoxic inactive, mammalian cell lines
Cytotoxic inactive, McCoy cells
Cytotoxic inactive, MCF cells
Cytotoxic inactive, MCF7 cells
Cytotoxic inactive, MDA-MB-231 cells
Cytotoxic inactive, MH-60 cells
Cytotoxic inactive, MT-4 cells

Cytotoxic inactive, myosarcoma cells
Cytotoxic inactive, N04 cells
Cytotoxic inactive, NCI-H1417 cells
Cytotoxic inactive, NCI-H187 cells
Cytotoxic inactive, NCI-H446 cells
Cytotoxic inactive, no explanation on cell species
Cytotoxic inactive, NSCLC-N6 cells
Cytotoxic inactive, NUGC cells
Cytotoxic inactive, NUGC-4 cells
Cytotoxic inactive, OVCAR-3 cells
Cytotoxic inactive, P388 cells
Cytotoxic inactive, PANC1 cells
Cytotoxic inactive, PC3 cells
Cytotoxic inactive, primary culture hmn PBMCs
Cytotoxic inactive, PTX10 cells
Cytotoxic inactive, Raji cells
Cytotoxic inactive, RAW264.7 cells
Cytotoxic inactive, RL33 cells
Cytotoxic inactive, S180 cells
Cytotoxic inactive, S180A cells
Cytotoxic inactive, SF268 cells
Cytotoxic inactive, SiHa cells
Cytotoxic inactive, SK-MEL cells
Cytotoxic inactive, SK-MES-1 cells
Cytotoxic inactive, SK-OV-3 cells
Cytotoxic inactive, SW620 cells
Cytotoxic inactive, T24 cells
Cytotoxic inactive, T24S cells
Cytotoxic inactive, T47D cells
Cytotoxic inactive, U251 cells
Cytotoxic inactive, U-87-MG cells
Cytotoxic inactive, U937 cells
Cytotoxic inactive, Vero cells
Cytotoxic inactive, WI-38 cells
Cytotoxic inactive, WiDr cells
Cytotoxic inactive, Wish cells
Cytotoxic inactive, yeast assay, no selective DNA-damaging, RS321NpRAD52(gal)
Cytotoxic inactive, yeast assay, no selective DNA-damaging, RS321NYCp50(gal)
cytotoxic to hepatoma cells
cytotoxic to nasopharyngeal carcinoma cells in vitro
cytotoxic to P-388 lymphocytic leukaemia cells in vitro
cytotoxic to P-388, KB and cancer cell lines
Cytotoxic, 1,3,8-trihydroxy for anthraquinone plays a significant role in the cytotoxic activity

Cytotoxic, 212 cells
Cytotoxic, 9KB hmn epidermoid nasopharyngeal carcinoma cells
Cytotoxic, 9L glioma cells
Cytotoxic, a promising lead as potential cancer chemopreventive agents
Cytotoxic, A2780 hmn ovarian cancer cells
Cytotoxic, A375 hmn melanoma cells
Cytotoxic, A498 hmn renal cancer cells
Cytotoxic, A549 non-small cell lung cancer cells
cytotoxic, against tumours
Cytotoxic, AGS gastric adenocarcinoma cells
Cytotoxic, animal tumor and plant tumor
Cytotoxic, antioxidant assay
Cytotoxic, antiproliferative
Cytotoxic, antiproliferative, A-2780
Cytotoxic, antiproliferative, AGS cells
Cytotoxic, antiproliferative, colorectal cancer cells
Cytotoxic, antiproliferative, hmn breast cancer cells
Cytotoxic, antiproliferative, MCF7
Cytotoxic, antiproliferative, PC3
Cytotoxic, antiproliferative, six esophageal cancer cells
Cytotoxic, aromatase inhibitor
Cytotoxic, B16 melanoma cells
Cytotoxic, B16(F-10) (moved) melanoma cells
Cytotoxic, BC hmn breast cancer cells
Cytotoxic, BC-1 hmn breast cancer cells
Cytotoxic, BCA-1 hmn breast cancer cells
Cytotoxic, Bcap37 hmn breast cancer cells
Cytotoxic, Bel7402 hmn liver cancer cells
Cytotoxic, Bel7405 hmn liver cancer cells
Cytotoxic, BGC823 hmn stomach cancer cells
Cytotoxic, BL6 melanotic carcinoma
Cytotoxic, BL6 mouse melanotic carcinoma
Cytotoxic, blocks expression of vascular endothelial growth factor(VEGF) mRNA in GI-101A cells
Cytotoxic, breast cancer cells
Cytotoxic, Brine Shrimp Lethality bioassay (Brine Shrimp Test)
Cytotoxic, BST
Cytotoxic, BT474 hmn galactophore cancer cells
Cytotoxic, BT549 hmn galactophore cancer cells
Cytotoxic, BXPC3 pancreas cancer cells
Cytotoxic, CA hmn liver cancer cells
Cytotoxic, CAKI hmn renal cancer cells
Cytotoxic, Calu1 hmn lung cancer cells

Cytotoxic, Capan1 pancreas cancer cells
Cytotoxic, CaSki hmn cervical carcinoma cells
Cytotoxic, cellular differentiation inducer in myelocytic leukemia cells
Cytotoxic, cellular differentiation inducer, HL-60
Cytotoxic, cellular differentiation inducer, mus myelocytic leukemia cells
Cytotoxic, CHAGO hmn undifferentiated lung cancer cells
Cytotoxic, Col2 hmn colorectal cancer cells
Cytotoxic, Colon205 colorectal cancer cells
Cytotoxic, Colon26-L5 mus colorectal cancer cells
Cytotoxic, colorectal cancer cells
Cytotoxic, COX-1 inhibitor
Cytotoxic, COX-2 inhibitor
Cytotoxic, cultural hmn throat epicytoma cells
Cytotoxic, cultured epidermal 308 cells
Cytotoxic, CXF94L hmn tumor cells
Cytotoxic, DLD hmn colorectal adenocarcinoma cells
Cytotoxic, DNA-damaging activity
Cytotoxic, DU145 prostatic cancer cells
Cytotoxic, EAC Ehrlich ascites cancer cells
Cytotoxic, EBV-EA
Cytotoxic, EBV-EA inhibitor TPA-induced
Cytotoxic, Ehrlich ascites cancer cells
Cytotoxic, EJ-1 hmn bladder cancer cells
Cytotoxic, estrogen alpha-receptor-binding assay
Cytotoxic, estrogen beta-receptor-binding assay
Cytotoxic, FM3A breast cancer cells
Cytotoxic, gpg horn cells
Cytotoxic, GXF251L
Cytotoxic, H116 hmn colorectal cancer cells
Cytotoxic, HCT hmn colorectal cancer cells
Cytotoxic, HCT116 hmn colorectal cancer cells
Cytotoxic, HCT15 hmn colorectal cancer cells
Cytotoxic, HCT8 hmn colorectal cancer cells
Cytotoxic, HEL normal hmn embryonic lung fibrocytes
Cytotoxic, HeLa culture cervical epithelial cancer cells from Henrietta Lack
Cytotoxic, HeLa-S3 hmn cervical epithelial cancer cells
Cytotoxic, Hep2 hmn liver cancer cells
Cytotoxic, Hep2,2,15 transfected with hepatitis B virus hmn liver cancer cells
Cytotoxic, Hep3B hmn liver cancer cells
Cytotoxic, Hepa1c1c7 liver cancer cells
Cytotoxic, Hepa59T/VGH hmn liver cancer cells
Cytotoxic, HepG2 hmn liver cancer cells
Cytotoxic, HGF normal hmn gingival fibroblast cells

Cytotoxic, HL-60 leukemia cells
Cytotoxic, hmn breast cancer cells
Cytotoxic, hmn cervical carcinoma cells
Cytotoxic, hmn colorectal cancer cells
Cytotoxic, hmn embryo lung cells
Cytotoxic, hmn intestinal muc adenocarcinoma
Cytotoxic, hmn lymphocytes
Cytotoxic, hmn medulloblastoma
Cytotoxic, hmn peripheral blood T cells
Cytotoxic, HO-8910 hmn ovarian cancer cells
Cytotoxic, HOG.R5 green fluorescent protein(GFP)-based reporter cells
Cytotoxic, HONE-1 hmn nasopharyngeal carcinoma cells
Cytotoxic, Hs578T hmn breast cancer cells
Cytotoxic, Hs740T hmn stomach cancer cells
Cytotoxic, Hs742T hmn breast cancer cells
Cytotoxic, Hs756T hmn stomach cancer cells
Cytotoxic, HSC-2 hmn oral squamous cell carcinoma cells
Cytotoxic, HSC-2 hmn oral squamous cell carcinoma cells, also active for normal hmn gingival fibroblasts HGF
Cytotoxic, HT1080 hmn fibrosarcoma cells
Cytotoxic, HT1080 hmn fibrosarcoma cells
Cytotoxic, HT29 hmn colorectal cancer cells
Cytotoxic, hTERT-RPE1 hmn telomerase reverse transcriptase-retinal pigment epithelial cells
Cytotoxic, HUVEC hmn umbilical vein endothelial cells
Cytotoxic, in vitro, Hepa1c1c7 liver cancer cells
Cytotoxic, induces apoptosis, causes rapidly apoptosis of many radioresistant and chemoresistant hmn squamous cell carcinoma
Cytotoxic, induces apoptosis, HL-60
Cytotoxic, inhibits biosynthesis of DNA, RNA and protein
Cytotoxic, inhibits growth of cells
Cytotoxic, inhibits growth of cells, GI-101A
Cytotoxic, inhibits growth of cells, HepG2
Cytotoxic, inhibits growth of cells, HL-60
Cytotoxic, inhibits growth of cells, KB
Cytotoxic, inhibits growth of cells, MCF7
Cytotoxic, inhibits growth of cells, NCI-H460
Cytotoxic, inhibits growth of cells, SF268
Cytotoxic, inhibits TPA-induced 32P combines with phospholipid in HeLa cells
Cytotoxic, Ishikawa anti-E2 bioassay
Cytotoxic, Jurkat-T hmn T-cell leukemia cells
Cytotoxic, K562 doxorubicin-resistant hmn leukemia cells
Cytotoxic, K562 hmn leukemia cells
Cytotoxic, Kato3 hmn stomach cancer cells

Cytotoxic, KB hmn nasopharyngeal carcinoma cells
Cytotoxic, quinone reductase induction assay, Hepa1c1c7 liver cancer cells
death from respiratory depression
decoction of the leaves of *Atalantia ceylanica* is applied for itching and other skin complaints
decomposes to form the thiocyanate ion, SCN⁻
decrease blood pressure at doses of 20 mg/kg body-weight
decrease motor activity
decrease myocardial oxygen consumption
decrease the blood pressure and the heart rate in the anaesthetised
decrease the rate of heart beat of cultures myocardial cells
Decreased the length of barley roots
defence
Defend against biotic stressors such as insects and pathogens
deficiency causes anorexia
deficiency causes beri-beri in severe cases
deficiency causes fatigue
deficiency causes gastrointestinal disturbances
deficiency causes megaloblastic anaemia
dehydration gives senecionine
dehydrogenated after ingestion to the related pyrrole, which is more toxic because it binds to the DNA in the liver
delayed intention tremors, ataxia, hypothermia and bradypnoea
deleterious and block the action of delta9-desaturase in seed oil of *Gossypium indicum*
demulcent agent
Dendrobium lohohense is a component of the Chinese drug, shi-hu
depigmentor
depilatory
depress blood pressure
depress heart rate
depress nervous activity
depress respiration
depressant effect on central nervous system, leading to death by respiratory failure
depressant on the central nervous system
desiccation resistance
detoxicant in medicine
diagnostic aid
diaphoretic activity
diaphoretic agent
dietary amino acid
dietary supplement
dietary supplement to treat multiple sclerosis
digitalis-like activity
digitalis-like, with acidotoxic activities

digitalis-like, with cardiotonic activities
dilation of the pupils
Dionaea plants have been used as an anticancer drug
disagreeable, rancid-cheese odour
Diseases of the immune system (Sepsis)
disinfectant agent
diuretic
diuretic activity
diuretic agent
diuretic of short duration
diuretic stimulant
DNA binding activity
DNA binding effect
DNA-binding activity
DNA-binding effect
dopamine antagonist in vivo (in cell culture and in radioreceptor assays)
dormancy regulating activity
dose of 10 mg/kg produce a substantial fall in blood pressure in anaesthetised
doses above 0.25 mg/kg produce a small rise in blood pressure
drowsiness

easily hydrolysed, the gallotannins in crude extracts prevent hydrolysis, and thus crude extracts are more effective

effective against gut microsomal monooxygenase
effective against leprosy, although it has now been superseded by synthetic drugs
effective against ringworm when taken orally
effective against tuberculosis, although it has now been superseded by synthetic drugs
effective against lymphocytic leukaemia in vivo at a dose of 25.0 microg/kg
effective as an anthelmintic
effective as an antirheumatic
effective as an emmenagogue
effective for the treatment of asthma
effective for the treatment of chronic bronchitis
effective gamma-aminobutyric acid antagonist
effective in the arachidonate metabolism of leukocytes
effective toxic agent
elicitor of allergic skin reaction
emetic
emetic activity
Emit volatiles in high amounts if plants are attacked by herbivores
employ as an antimicrobial in foodstuffs
employ as an antioxidant in foodstuffs
employed as a deodorant (in a wick type freshener)
employed in organic synthesis

enhance adrenocorticotrophic hormone-induced lipolysis in fat cells
enhance adrenocorticotrophic hormone-induced lipolysis of liver cells
enhance adventitious bud formation
enhance chemical alteration of sex expression
enhance colour change of fruit
enhance embryogenesis in callus
enhance epicotyl growth
enhance fruit blackening
enhance fruit growth
enhance fruit set
enhance growth
enhance growth at low concentration
enhance in vitro phagocytosis of granulocytes
enhance lateral bud formation
enhance leaf senescence
enhance noradrenaline and dopamine levels in brain
enhance petal senescence
enhance pod set
enhance seed germination
enhance seedling growth
enhance senescence
enhance the synthesis of glutathione necessary for the detoxification of paracetamol
enhance vegetative growth
Enhanced plant growth of *Arabidopsis thaliana*
essential catalyst for photosynthesis
essential dietary amino acid
essential for the growth of infants
essential in metabolism as a constituent of nucleic acids, especially as the D-riboside, adenosine
essential in metabolism as a constituent of nucleic acids, especially as the riboside, cytidine
essential in metabolism as a constituent of nucleic acids, especially as the riboside, guanosine
essential in metabolism as a constituent of nucleic acids, especially as the riboside, uridine
essential in metabolism as a nucleotide
essential in metabolism as cytidine monophosphate CMP (2'- and 3'-cytidylic acid), ribonuclease inhibitors
essential in metabolism as guanosine mono-, di-, and tri- phosphates
essential in metabolism as uridine diphosphate glucose
ester derivatives have been used medicinally for treating myasthenia gravis
excessive dose is involved in the pathogenesis of pellagra
excessive doses are neurotoxic
excessive perspiration
excitation tremors
excitatory activity

excite central neurones
exert hypotensive action
exerting an antimetabolic effect by immediately terminating protein synthesis in cells
exhibit alpha-amylase activity in aleurone
exhibit antibacterial activity
exhibit antifungal activity
exhibit antiviral phototoxicity
exhibit cathartic activity
exhibit delta5-lipoxygenase
exhibit efficacy in respiratory infections
exhibit immunomodulatory activity
exhibit lens aldose reductase
exhibit markedly toxic property
exhibit photodynamic antibacterial activity

exhibit phytotoxicity which can be prevented by large excesses of ornithine, citrulline or arginine

exhibit piscicidal activity
exhibit spasmolytic activity
exhibit strong analgesic activity comparable to that of morphine
exhibit toxicity, the intermediate host of Schistosoma
exhibit tuberization process
expectant activity
expectorant
expectorant activity
expectorant in veterinary practice
extremely toxic

extremely toxic and carcinogenic, affecting DNA, RNA and protein synthesis as well as lipid metabolism

extremely toxic, causing paralysis of motor nerve endings

far less toxic than retrorsine except when given orally, where it is converted by gut enzymes to retrorsine base

fatal dose is about 50 mg

fatal dose is between 2 and 5 mg/kg body-weight, stop respiration by blocking the tricarboxylic acid cycle

febrifuge activity, as well as central nervous system action
feeding attractant
feeding attractant on Morus alba
feeding attractant on phloem of Oryza sativa
feeding attractant on Polygonum
feeding attractant on Polygonum species
feeding attractant on Salix
feeding attractant to the caterpillars

Feeding attractants

feeding deterrent

feeding deterrent activity

feeding deterrent on *Polygonum* species

feeding deterrent to larvae on *Polygonum*

feeding deterrent to the caterpillars

Feeding deterrents

feeding inhibitor

feeding inhibitor for the fifth instar larva

feeding stimulant

feeding stimulant partly

feeding stimulants from *Gossypium hirsutum*

Female-specific diseases (Breast cancer)

fishy odour

flammable

flavanone

flavor precursor of (R)-5-vinyl-2-oxazolidinethione (goitrin)

flavour component

flavour component, together its the decomposition products

flavour component, together with breakdown products formed during cooking

flavour component, together with decomposition products produced during cooking

flavour component, together with enzymatic hydrolysis products

flavour component, together with hydrolysis products formed during cooking

flavour component, together with its breakdown products

flavour component, together with its decomposition products formed during cooking

flavour component, together with its enzymatic breakdown products

flavour component, together with the breakdown products

flavour compound

flavour ingredient

flavour principle of *Zingiber officinale*

flower buds of *Magnolia salicifolia* are used as a tranquilliser

flower buds of *Magnolia salicifolia* are used for nasal diseases

flower buds of *Magnolia salicifolia* are used for treating headaches

flowers of *Carthamus tinctorius* were formerly used in rouge and for dyeing food

for the effects of ergot poisoning or ergotism, see ergotamine

frequent cause of poisoning

Fritillaria alkaloids are used for the treatment of chest ailments

Fungal growth inhibition

Fungal infections

fungicidal activity

fungistatic activity

fungitoxic

fungitoxic activity

Galipea officinalis bark has antidyenteric property
Galipea officinalis bark has antiperiodic property
Galipea officinalis bark has antipyretic property
Galipea officinalis bark has bitter tonic property
ganglionic blocking agent
ganglioplegic parasymphomimetic agent
gastric secretion
gastric sedative
genotoxic
genotoxic in fibroblast mutagenicity assay
genotoxic in the fibroblast-mutagenicity assay
genotoxicity in the fibroblast mutagenicity assay
germination inhibitor
goitrogenic in calves produced by heifers fed mimosine
gonadotrophic (follicular stimulation) activity
good antibacterial activity
Good markers to indicate early fungal contamination
granulating agent
granulation inhibitory activity
growth factor
growth inhibitor
growth inhibitory activity against Co-115 human carcinoma cell line
growth inhibitory activity against larvae
growth promoting activity, similar to gibberellic acid when tested on hypocotyls
growth promoting factor
growth retardant when given orally
growth-promoting effects
haemoglobin induction activity
haemolytic activity
haemorrhagic activity
haemorrhagic effect
haemostatic
haemostatic action on platelets in vitro
hallucinogen
hallucinogen, major constituent of ololiuqui
hallucinogen, principal active constituent of ololiuqui
hallucinogenic
hallucinogenic at high doses
hallucinogenic component of snuff
hallucinogenic in high doses
hallucinogenic property
hallucinogenic, due mainly to the presence of mescaline and N-methylmescaline

hallucinogenic, with an unusually pleasant sensation of intellectual and physical relaxation, involving distortions of time and space perception

Haplopappus heterophyllus is claimed to be responsible for milk sickness after consumption of milk from *Bos taurus* feeding on *Eupatorium urticaefolium*

has an important role as a cytoplasmic osmoticum in counteracting the salt stress

has insecticidal properties

has one-tenth the activity of 2,4-D as a plant growth inhibitor

have a direct action upon the heart, often terminating in ventricular fibrillation

have potential as a defleecing agent

have promise in the treatment of schistosomiasis

have some central nervous system activity, but less so than caffeine

have some potency as a neuromuscular blocking agent

help control blood sugar

help to protect teak wood

hepatic function

hepatocarcinogenic

Hepatoprotective

hepatotoxic

hepatotoxic activity

hepatotoxic alkaloid causing necrosis of the liver

hepatotoxic, causing veno-occlusive disease

hepatotoxin

herbal remedy

herbicide

herbicide activity

herbicide

high cytotoxicity against nasopharyngeal cancer cells

high doses cause an initial enhancement followed by depression

high toxicity

highly active in vivo on the uteri

highly active inhibitor of cholinesterase activity

highly effective inhibitor of growth

highly poisonous

highly toxic

highly toxic alkaloid

highly toxic at concentrations of 20 mg/kg body-weight

highly toxic by inhalation

highly toxic by *Narcissus*, LD50 41 mg/kg body-weight

highly toxic in any quantity

highly toxic though 40 times less toxic than aconitine intravenously

highly toxic when taken orally

highly toxic, causing respiratory paralysis

highly toxic, LD50 18 mg/kg body-weight intraperitoneally

highly toxic, with a lethal dose of 100mg
highly toxic, with a lethal dose of 10mg
highly unpleasant odour
host-specific pathotoxin
hot and pungent
hot taste of Piper
hydrochloride is a strong antimicrobial agent
hydrocholeretic effect
hydrolysis forms allylthiocyanate
hydrolysis leads to the formation of a volatile, pungent isothiocyanate
hydrolysis liberates the thiocyanate ion, SCN⁻
hydrolysis yields the thiocyanate ion SCN⁻
hyperactivity, tremors, and may lead to death
hyperglycaemic activity
hypertensive
hypertensive activity
hypnotic
hypnotic activity
hypnotic synergist
hypocholesterolaemic agent
Hypocholesterolemic
Hypocholesterolemic and hypoglycaemic activities
hypoglycaemic
hypoglycaemic activity
hypoglycaemic activity in fasting at 20 mg/kg body-weight intravenously
hypoglycaemic activity in fasting at 50 mg/kg body-weight orally
Hypoglycaemic, hypolipidaemic, hypocholesterolic
hypolipidaemic activity
hypotensive
hypotensive action
hypotensive activity
hypotensive activity, causing a transient fall in blood pressure
hypotensive agent
hypotensive agent, causing a transient fall in blood pressure
hypotensive effect
hypothermic
hypothermic action
hypothermic activity
immunomodulating activity
Immunomodulator
immunomodulator, inhibiting the generation of reactive oxygen species by neutrophils
immunomodulatory effect at low concentrations
immunostimulant

immunostimulating at low doses
immunosuppressant
immunosuppressive activity
immunosuppressive activity
immunosuppressive activity in lymphocyte cells test systems at higher dosage
immunosuppressive activity in microphages at higher dosage
immunosuppressive activity in vitro
impair liver function
impair mitochondrial respiratory activity in liver
implicated in the poisoning when ingested *Convolvulus arvensis*
important antimalarial drug
important flavour precursor
important in carbohydrate metabolism as a galactosyl donor molecule in the biosynthesis of raffinose and other storage oligosaccharides
important ingredient of arrow poisons known as curare
important intermediate in the biosynthesis of morphine
Improve blood circulation and promote hair growth
improve coordination
Improved the growth of tobacco seedlings in vitro
in general, the toxicity seems to be slightly lower than that of aconitine
in part responsible for the resistance to attack as well as to microbial infection
in vitro antihepatotoxic activity due to enzyme inhibitory action on glutamine-pyruvic transaminase
in vitro antihepatotoxic activity, due to enzyme inhibitory action on glutamine-pyruvic transaminase
in vitro antitumour activity
in vitro cytotoxicity in P-388 lymphocytic leukaemia test
inactive by mouth but, when given by injection, produce vasoconstriction
inactive by mouth but, when given by injection, reduced blood flow to the brain, kidney, liver, skin and skeletal muscle and dilatation of the pupil
incorporated into polyamide and polyester fibers
increase bile flow
increase blood flow in isolated heart
increase blood pressure
increase cardiac output
increase cell size or cell number in apical meristem
increase cell size or cell number in frond
increase coronary blood in heart
increase coronary resistance
increase learning efficiency
increase neutrophilic granulocyte count
increase phloem regeneration
increase protein synthesis

increase RNA synthesis in liver nuclei in vitro
increase skin capillary resistance in both intensity and duration
increase the amplitude and decrease the frequency of cardiac contractions
increase the amplitude and frequency of respiratory movements
increase the heart rate
increase the heart tone and contractility
increased mental activity
indicate anti-inflammatory activity in vitro
indicated for treatment of hyperlipaemic syndrome, mainly due to lowering of the serum cholesterol level
indicating activity against allergic diseases
indicating activity against asthma diseases
Indirect defense responses
induce acute renal failure
induce allergic skin reactions
induce beta-carotene accumulation
induce bud formation
induce chilling resistance
induce chlorosis
induce coleoptile elongation
induce contractions of uterus
induce cytochrome P450
induce delirium
induce dermatitis
induce dormancy
induce elongation of decapitated epicotyl
induce elongation of decapitated hypocotyl
induce epicotyl elongation
induce epinasty
induce ethylene production
induce expansion growth of leaf
induce flower bud formation
induce flowering
induce fruit ripening
induce fruitlet abscission
induce gravitropism
induce growth of pollen tube
induce haemoglobin
induce haemolysis
induce hallucinations
induce hook growth
induce hypocotyl elongation
induce hypocotyl elongation in light-inhibited seedling

induce hyponastic curvature of primary leaf
induce internode growth in perianth removed plant
induce leaf abscission
induce leaf growth
induce leaf senescence
induce leaf-sheath elongation
induce lignification
induce mesocotyl elongation
induce microtubule disruption
induce muscular spasm
induce necrosis in cell cultures, upsetting the redox potential of the plant cell
induce necrotic lesions in susceptible cultivars at a concentration of 5 microg/ml in less than 12 hours
induce nodulation gene expression in the symbiosis with its legume host, *Pisum sativum*
induce oestrogen synthetase
induce pathenocarpy
induce pedicel abscission
induce peduncle elongation
induce petiole abscission
induce petiole epinasty
induce photodermatitis
induce respiration
induce ripening
induce root elongation
induce root formation
induce root formation in cutting
induce root formation in shoot
induce RubisCO degradation
induce secondary xylem formation
induce shoot regeneration on callus
induce shoot regeneration on leaf disk
induce shoot regeneration on protonemata
induce skin rashes by prolonged treatment
induce sleep
induce synthesis of proteinase inhibitors
induce tendril coiling
induce thickening growth of cotyledon
induce thickening growth of hypocotyl
induce thickening growth of tuber
induce translocation
induce vascular differentiation in callus
induce vascular differentiation in root
induce vascular differentiation in shoot

induce vascular differentiation in stem

Induced resistance to bacterial infection

Induction of indirect defenses

inductor of cytochrome P450

industrial uses include the manufacture of ascorbic acid, humectants, pharmaceutical excipients, plasticisers and toothpastes

ineffective

infected *Mangifera indica* may be toxic

infertile

ingestion can cause vomitin and/or diarrhoea

ingestion may cause convulsions

ingredient in cholaretics

ingredient in laxatives

ingredient of antifreeze mixtures

ingredient of copying inks

ingredient of liqueurs

ingredient of lubricants

ingredient of pharmaceutical preparations

ingredient of plasticisers

ingredient of shock absorbing fluids

inhibit growth

inhibit 5-lipoxygenase

inhibit 5-lipoxygenase and cyclic adenosine monophosphate phosphodiesterase, thus explaining the anti-inflammatory

inhibit 5-lipoxygenase, an enzyme of arachidonic acid metabolism

inhibit activation of protein kinase C

inhibit activation of protein kinase C in a dose-dependent manner

inhibit activity of mitochondria

inhibit adenylate cyclase activity in brain preparations and in thyroid cells

inhibit adrenaline-induced lipolysis in fat cells

inhibit adrenaline-induced lipolysis of fat cells

inhibit adventitious root elongation in hypocotyl and epicotyl cuttings

inhibit adventitious root formation

inhibit adventitious root formation in hypocotyl and epicotyl cuttings

inhibit aggregation of platelets to various agonists (considerably more potent than theophylline)

inhibit aldose reductase

inhibit arachidonic acid metabolism

inhibit binding of leukotrienes in various receptor assays

inhibit both cyclo-oxygenase and 5-lipoxygenase pathways of arachidonic metabolism

inhibit carrageenan-induced foot inflammation

inhibit chemically induced carcinogenic action

inhibit cholineesterase activity (reversible)

inhibit chorionic gonadotrophin

inhibit coleoptile elongation
inhibit coleoptile elongation by IAA
inhibit coleoptile growth
inhibit conditioned avoidance reactions
inhibit conidial germination
inhibit cotyledon growth
inhibit cyclic adenosine monophosphate phosphodiesterase
inhibit cyclic adenosine monophosphodiesterase in vitro
inhibit cyclic nucleotide phosphodiesterase
inhibit cyclic nucleotide phosphodiesterases
inhibit cyclo-oxygenase
inhibit delta5-lipoxygenase
inhibit delta5-lipoxygenase of platelets, due to inhibition of cyclo-oxygenase
inhibit deposition of lipid peroxides and cholesterol in injured liver
inhibit development in a concentration of 3 microg/ml
inhibit development in concentrations of 0.1–3 microg/ml
inhibit DNA synthesis
inhibit drying of varnishes and polyester lacquers
inhibit ear oedema
inhibit electron transport in isolated mitochondria
inhibit elongation growth
inhibit embryo germination
inhibit embryogenesis in callus
inhibit embryogenesis in cell suspension culture
inhibit embryogenesis in cultured leaf explant
inhibit embryogenesis in petiole culture
inhibit embryogenesis in stem
inhibit enzymatic IAA degradation in vitro
inhibit epicormic bud development
inhibit epicotyl elongation
inhibit expansion and mitosis of cell
inhibit fatty acid mobilisation
inhibit flowering
inhibit formation of 5-lipoxygenase products in leukocytes
inhibit formation of 5-lipoxygenase products in leukocytes, indicating anti-inflammatory property
inhibit formation of 5-lipoxygenase products in peritoneal cells
inhibit formation of cyclooxygenase products of the arachidonate metabolism in vitro
inhibit fruit growth
inhibit fruit ripening
inhibit gastric ATPases
inhibit gastric secretion
inhibit germ tube growth

inhibit germination
inhibit germination of spore at concentrations of 5×10^{-5} M and higher
inhibit glyoxalase-I
inhibit gonadotrophin release activity in brain preparations and in thyroid cells
inhibit gonadotropin release
inhibit growth
inhibit growth at high concentration
inhibit growth by interfering with protein synthesis on the ribosome
inhibit growth of crown gall tumours on disks
inhibit growth of larvae, as does astilbin
inhibit growth of shoot apex
inhibit gynophore elongation
inhibit heart beat at higher concentrations
inhibit heat shock tolerance
inhibit HeLa cell growth and stabilise HeLa cell polysomes in vivo
inhibit HeLa cell growth as well as protein synthesis in cells
inhibit HeLa-cell proliferation
inhibit histidine decarboxylase
inhibit human immunodeficiency virus reverse transcriptase, thus showing anti-AIDS activity
inhibit hypocotyl elongation
inhibit hypocotyl growth
inhibit hypocotyl or radical growth in germinating seedlings
inhibit induced lipid peroxidation in liver microsomes
inhibit induced lipid peroxidation in liver mitochondria
inhibit induced lipid peroxidation in microsomes of liver cells
inhibit induced lipid peroxidation in mitochondria and microsomes of liver
inhibit induced lipid peroxidation in mitochondria in fat cells
inhibit induced lipid peroxidation of liver microsomes
inhibit induced lipolysis in liver mitochondria
inhibit induced oedema formation in paw
inhibit induced peroxidation in liver mitochondria and microsomes
inhibit inflammation caused by the tumour promotor, 12-O-tetradecanoylphorbol-13-acetate
inhibit inflammation induced by the tumour promotor 12-O-tetradecanoylphorbol-13-acetate
inhibit insulin degradation
inhibit internode elongation
inhibit iodothyronine deiodinase
inhibit ionophore-induced arachidonic acid release and metabolism
inhibit ionophore-induced arachidonic acid release and metabolism in peritoneal macrophages
inhibit larval development
inhibit lateral bud formation
inhibit leaf development
inhibit leaf greening
inhibit leaf growth

inhibit lens aldose reductase

inhibit leukocyte elastase

inhibit lipase activity

inhibit lipid peroxidation in mitochondria of liver cells

inhibit liver mitochondrial monoamine oxidase in vitro and, hence, acts on the central nervous system

inhibit lycopene accumulation

inhibit many enzymes, e.g., 3',5'-cyclic adenosine monophosphate phosphodiesterases

inhibit many enzymes, e.g., lipogenases

inhibit many enzymes, e.g., protein kinase C, lens aldose reductase

inhibit mesocotyl growth

inhibit mobilisation of spermatozoa

inhibit monoamine oxidase in vitro

inhibit monoamine oxidase/A in vitro

inhibit monoamineoxidase

inhibit mycelial growth

inhibit NADH-oxidase

inhibit NADH-oxydase

inhibit NADH-oxydase and succinoxidase enzyme systems

inhibit ornithine carbamoyltransferase

inhibit oxygen intake of ascites tumour

inhibit peripheral action of acetylcholine

inhibit phenylalanine metabolism

inhibit photophosphorylation

inhibit photosynthesis

inhibit placental alkaline phosphatase caused by canavanine acting as an antimetabolite, and thereby blocking arginine uptake

inhibit platelet activating factor, a lipid mediator of hypersensitivity and inflammation, from binding to its receptor site

inhibit platelet aggregation

inhibit platelet aggregation in vitro

inhibit platelet lipoxygenase

inhibit pollen germination

inhibit prolactin release

inhibit prolactin release, preventing implantation and lactation

inhibit proliferation and invasion of basophil histamine release

inhibit proliferation and invasion of malignant tumour cells in vitro and the release of oxidants by neutrophils

inhibit proliferation of lymphocytes

inhibit prostaglandin biosynthesis

inhibit prostaglandin biosynthesis in vitro

inhibit prostaglandin synthase

inhibit prostaglandin synthesis by human colonic mucosa
inhibit prostaglandin synthesis in vitro
inhibit prostaglandin synthetase
inhibit protein kinase C
inhibit protein synthesis in cells by inhibiting peptide bond formation
inhibit protonema growth
inhibit pulvinules opening
inhibit respiration of art liver mitochondria at low concentration
inhibit respiratory process at high doses
inhibit reverse transcriptase activity of various RNA oncogenic viruses
inhibit root elongation
inhibit root formation
inhibit root growth
inhibit root induction
inhibit seed germination
inhibit seedling growth
inhibit seedling growth at 10 ppm
inhibit serotonin secretion
inhibit shoot growth
inhibit smooth muscle activity in vitro
inhibit smooth muscle contraction

inhibit specific binding of the tumour-promoting agent 12-O-tetradecanoylphorbol 13-acetate to skin

inhibit specifically serine protease
inhibit spore germination
inhibit stem growth
inhibit succinoxidase
inhibit the binding of calcium to muscle protein
inhibit the binding of platelet activating factor to its reception site
inhibit the binding of platelet factor to its receptor site
inhibit the contraction of isolated duodenal strip
inhibit the contractions of isolated intestine
inhibit the growth
inhibit the growth of sarcoma 45
inhibit the metabolism of arachidonic acid by human polymorphonuclear leukocytes
inhibit the metabolism of the carcinogen benzopyrene in embryo cell cultures
inhibit the proliferation of lymphocytes at a concentration of 10^{-4} M
inhibit the tumour-promoting activity of teleocidin
inhibit the viability of Ehrlich ascites tumour cells
inhibit tumour growth in vitro
inhibit tumour-promoting activity of teleocidin on skin
inhibit various enzymes including ATP-ase, diamine oxidase and some aminotransferases
inhibition of germination

inhibition of growth
inhibitor of 2,4-dinitrofluorobenzene-induced hypersensitivity
inhibitor of aldose reductase
inhibitor of amyloglucosidase
inhibitor of cyclic adenosine monophosphate phosphodiesterase
inhibitor of cyclic nucleotide phosphodiesterases
inhibitor of intestinal peristalsis
inhibitor of lens aldose reductase
inhibitor of seed germination
inhibitor of the enzyme monoamine oxidase/A
inhibitor of various enzymes
inhibitor of xanthine oxidase
inhibitory action against HeLa cells
inhibitory action on adenosine diphosphate-induced platelet aggregation
inhibitory action on induced lipolysis in liver microsomes
inhibitory activity against basophil histamine release
inhibitory activity against cyclic adenosine monophosphate phosphodiesterase
inhibitory activity on the enzyme xanthine oxidase
inhibitory against microphages at higher dosage
inhibitory against T- and B-lymphocytes at higher dosage
inhibitory effect on blood platelet aggregation
inhibitory effect on platelet aggregation
inhibitory to HeLa cells
inhibitory transmitter at the neuromuscular junction in the central nervous system
involved in the electron transport in mitochondria
insect antifeedant
insect antifeedant at a concentration of 0.05%
insect antifeedant at a concentration of 0.25%
insect attractant
insect feeding inhibitor
insecticidal
insecticidal activity
insecticidal against larvae
insecticidal property
insecticidal, killing larvae at a concentration of 2.0 microg/ml
insecticide
insecticide synergist
insecticide, synergistic with other insecticides
insecticide, with antimetabolic activity due to blocking nitrogen transfer from glutamine to aspartic acid, and essentially nontoxic in other systems
intensely sweet (80 times sweeter than sucrose)
intensification of heart contraction and diuresis
interact with benzodiazepine receptors

interesting cardiovascular properties
intermediate in flavours
intermediate in perfumery
intermediate in the shikimic acid pathway
intermediate in the synthesis of drugs, dyes and high polymers
intermediate in tropane alkaloids
intermediate used in the manufacture of dyes, and of esters
intestinal stimulant similar to but weaker than that of hydrastine
intraperitoneal injection produces muscular weakness
intravenous administration lowers blood pressure for 15–20 min
intravenous administration of 20 mg/kg lowers the blood pressure
intravenous administration produces a brief hypotensive response
intravenous doses of 5–15 mg/kg cause a fall in blood pressure
intravenous doses of 5–15 mg/kg cause a temporary respiratory depression
intravenous injection produces convulsions
involved in carbohydrate metabolism
involved in hormone-mediated biological systems as a second messenger molecule
involved in the diurnal regulation of this key enzyme of metabolism
involved in the intermediate metabolism of plants, e.g., in the biosynthesis of lathyrine
irritant
irritant to eyes, nose and throat
irritant, and corrosive to skin
irritate eyes and mucosa
is a tremorgenic toxin
its aglycone acts as an oxidant in seed
its harmful side-effects have so far prevented its use in clinical practice
its odour resembles that of coumarin
its spasmolytic activity is higher than that of thymol or carvacrol
jasmine odour, attracting pollinators
jointly responsible for milk sickness after consumption of milk from *Bos taurus* feeding on *Eupatorium urticaefolium*
Juglans nigra-like odour
Justicia is used as an antistress and antifatigue drug
Kadsura longipedunculata is used as a treatment for ulcers
keratolytic agent
key role in the biosynthesis of threonine, isoleucine and methionine
Kill a broad range of plant- and human-pathogenic fungi and bacteria
killing by respiratory paralysis
kinetin-like activity, stimulating root growth of seedlings
lachrymator
lachrymatory
large doses cause respiratory paralysis
large doses have a strychnine-like effect, causing convulsions and paralysis

large quantities can affect the central nervous system

larger doses lead to a decrease in motor activity, to respiratory difficulties, tremor, increased tone in the skeletal musculature and clonicotonic convulsions

larval feeding stimulant

larval growth inhibitor

larvicidal

larvicide

laxative

laxative activity

laxative property

LD50 on intravenous injection is 57 mg/kg body-weight

lead to myocardial ischaemic improvement

Leaf and stem have the highest antioxidant activity

Ledebouriella is used as a diaphoretic

Ledebouriella is used as an analgesic

Ledebouriella is used as an antipyretic

lemon-like scent

less sweet than cane sugar

less than one-third as sweet as sucrose

less toxic

lethal

lethal and clastogenic effects on cells in tissue culture

lethal and mutagenic photosensitising effects

lethal dose is about 200 mg

lethal dose is about one gram

lethal dose lies between 1 and 10 mg

lethal when given intravenously, but does not appear to be toxic orally

lipid lowering activity in liver microsomes

lipotropic

lipotropic and associated with vitamin B complexes

little effect on the heart rate of anaesthetised in doses up to 5 mg/kg intravenously

liver protective activity

local anaesthetic action, about three times as potent as cocaine

local anaesthetic action, almost equal to that of cocaine

local anaesthetic activity

local anaesthetic potentiator

local anaesthetic used mainly in ophthalmology

low anti-inflammatory activity

low doses produce only a slight enhancement of the response to the phrenic nerve-diaphragm preparation

low grade hepatocarcinogen

low toxicity

low toxicity compared to aconitine

low toxicity compared with most pyrrolizidine alkaloids
low toxicity, LD50 intravenously in 1290 mg/kg body-weight
lower blood glucose levels
lower blood pressure
lower blood sugar levels
lower isolation-induced aggression
lower serum cholesterol in large doses
lower the blood pressure
lowering of blood pressure
lowers blood pressure when administered intravenously at a dose of 1.0 mg/kg body-weight
main causal agent of poisoning by leaves of *Taxus baccata*
main clinical use is as an antidepressant
main component in a exhibiting antimicrobial activity
main source of energy
main use is as a bronchodilator in asthma
main use is as a diagnostic agent for circulatory disorders
main use is as a diagnostic agent for gastric secretion
main use is as a respiratory stimulant in asthma
main use is as a tool in biochemical research
main use is as a tool in biochemical research
main use is as a vasoconstrictor of mucous membranes in rhinitis and sinusitis
main use is in the form of eye drops as a miotic

main use is in treatment of shock, but is inactive orally and must be given by dilute intravenous infusion

main uses are in biochemical research on heredity, cancer
main uses are in biochemical research on heredity, viral diseases
major allergen, causing allergic skin reactions
major attractant
major contributor to the quince flavour

major electron acceptor in the oxidation of carbohydrates in plant metabolism, but also has many other roles

major floral scent constituent
major odour principle of *Allium sativum*
major use is in dentrifices and mouthwashes because of its antiplaque activity
major use is to discourage smoking of tobacco
major use is to prevent rejection of implanted organs such as heart and kidney
mannosidase inhibitor
marked hypotensive activity
mauve pigment
mauve to blue flower pigment
may be involved in protein synthesis and growth regulation
may be pharmacologically active
may be responsible for neurological disorders feeding on *Calysteria*

may be used to counteract the effects of anticholinergics such as atropine
may cause contact dermatitis
may cause eczematous dermatitis
may cause short-lived intoxication in high doses
may contribute, with parthenolide, to the medicinal use of feverfew as a plant drug
mediator of hypersensitivity
mediator of inflammatory processes
medicine as an anticonvulsant
membrane stabiliser
Mental and behavioral disorders (Autism spectrum disorders)
Mental and behavioral disorders (Schizophrenia)
metabolite of cocaine
microbial growth inhibitor
microbial growth retardant due to competitive inhibition of proline uptake and incorporation, with particular reference to collagen synthesis
mild analgesic
mild anticholinergic
mild antidepressant activity
mild antiseptic activity, 2.25 times stronger than phenol
mild central nervous system depressant with antistress
mild depressant effect on the central nervous system
mild euphoriant
mild irritant
mild laxative
mild local anaesthetic activity
mild sweetener
mildly abdominal pain
mildly cardiotoxic
mildly causing nausea
mildly dilation of the pupils
mildly drowsiness
mildly toxic
mildly toxic base
mildly toxic, LD50 intraperitoneally 750 mg/kg body-weight
mimic the effects of the neurotransmitter GABA
minimum lethal dose of hydrogen cyanide is 0.5–3.5 mg/kg body-weight
minor central nervous system depressant with some anti-anxiety activity
minor central nervous system depressant with some antistress activity
moderate action
moderate anaesthetic activity
moderate analgesic properties
moderate antibacterial activity
moderate anticholinesterase activity

moderate antifeedant activity
moderate antifungal activity
moderate antifungal activity in vitro
moderate contact sensitising (allergenic) activity
moderate cytotoxic activity
moderate inhibition of the enzyme monoamine oxidase/A in vitro
moderate inhibitor of induced lipid peroxidation in liver mitochondria
moderate inhibitor of monoamine oxidase/A
moderate molluscicidal activity
moderate mutagenic activity
moderate toxicity
moderate tuberculostatic activity
moderately active against P-388 lymphocytic leukaemia tumours
moderately active as a phagocytosis inhibitor of granulocytes
moderately active in depressing the response of the phrenic ileum preparation
moderately active in depressing the response of the phrenic nerve-diaphragm preparation
moderately antifungal activity
moderately cytotoxic against KB-cell lines
moderately cytotoxic in 3 tumour cell lines
moderately cytotoxic in the P-388 lymphocytic leukaemia cell system
moderately phototoxic
moderately phytotoxic
moderately toxic
moderately toxic, LD50 27.5 mg/kg body-weight, causing cardiac damage, dyspnoea, and lowered blood pressure
moderately zoo-toxic
molluscicidal activity
molluscicide
more effective as a respiratory depressant than aconitine, but the cardiovascular potencies of the two alkaloids are very similar
more soluble derivative, hydroxyethylrutoside
more toxic than morphine
more toxic than rotenone
more toxic when inhaled than when ingested
mortal
most common medicinal used is based on antimicrobial action against infections or wounds
motor depressant at low doses
mousy odour
much too toxic
murin antileukaemic (P388) activity
muscle relaxant
muscle relaxant in bulb extract
muscle-relaxant similar to (+)-tubocurarine

muscular relaxant action
mutagen
mutagenic
mutagenic activity in strain TA 100
mutagenic to cell chromosomes
mutagenic to chromosomes
mutagenic to cultured cells
mydriatic
narcotic
narcotic action
narcotic analgesic
narcotic, cocaine-like stimulant
narcotic, subject to widespread abuse
nasal inhalant
natural inhibitor of flowering present in leaves
negligible effect on the heart rate of anaesthetised in doses up to 5 mg/kg intravenously
nematocidal activity
nematocidal at a concentration of 25 microg/ml
nematocide
neoplasm-inhibiting activity
neuro-excitatory in large doses
neuromuscular blocking agent
neuromuscular blocking agent, six to eight times more potent than the isoquinoline alkaloid tubocurarine
neurotoxic
neurotoxin
neurotransmitter in the central nervous system, not pass the blood-brain barrier
neurotrophic activity on neuronal cell cultures of foetal cerebral hemisphere
nicotine antagonist, but with no medicinal usage
nicotine-like action on the nervous system
no activity
no arrhythmogenic activity, in contrast to, e.g., aconitine and lappaconitine
nodulation signal in *Medicago sativa*
nodulation signal in roots of *Pisum sativum*
noncompetitive inhibitor of peroxidase activity
nonessential amino acid
nonessential dietary amino acid
nonhepatotoxic unless esterified
nontoxic
nontoxic up to 500 mg/kg body-weight
not a typical cyanogenic glycoside
not markedly toxic

not seem to share the hypotensive and sedative activities of reserpine, although similar in structure

notably as a repellent

nucleic acid base of limited distribution

numerous phytotoxic effects

nutrient

Nutritional and metabolic diseases (3-Methylcrotonylglycinuria)

Nutritional and metabolic diseases (Cystinuria)

Nutritional and metabolic diseases (Diabetes)

Nutritional and metabolic diseases (Diabetes/diabetic ketoacidosis)

Nutritional and metabolic diseases (Hypermethioninemia)

Nutritional and metabolic diseases (Isovaleric acidemia)

Nutritional and metabolic diseases (Methionine malabsorption syndrome)

Nutritional and metabolic diseases (Phenylketonuria)

Nutritional and metabolic diseases (Trimethylaminuria)

Nutritional and Metabolic Diseases (Type 1 diabetes mellitus)

Nutritional and metabolic diseases (Tyrosinaemia)

occur in the defensive secretions

odoriferous principle of seeds

odour of *Allium sativum*

odour of rotten *Brassica oleracea*

odour principle

odour, fishy

oedematous agent

oestrogenic

oestrogenic activity

on hydrolysis, it gives demissidine, for use as a cholinesterase inhibitor

on hydrolysis, it gives demissidine, for use as a repellent

one of a number of chemically related plant hormones called turgorins

one of natural precursors of the theaflavins

one of the bitterest substances known, significantly bitter at a molar concentration of 1×10^{-5}

one of the main alkaloids responsible for the gangrenous infections of the extremities, due to the loss of blood supply

one of the major contact allergens of bee propolis

one of the major contact allergens of propolis

one of the most potent plant anticancer agents discovered

one of these is 3-(methylsulfonyl)-propylisothiocyanate

only slight central nervous system stimulation

orally active neuromuscular blocking agent

orally toxic

orange pigment

orange-brown pigment

orange-red pigment

orange-red pigment, the principle of madder, one of the most ancient of natural dyestuffs

oviposition deterrent to the females

oviposition repellent to female

oviposition stimulant

oviposition stimulant to female

Oviposition stimulants

oxytocic agent

oxytocic agent, which has been used in treatment of cardiac insufficiency

paralysing effect in higher doses

parenteral administration causes weakness in the extremities, clonic convulsions and respiratory depression

paresis and clonic movements

partial loss of motor control and respiratory paralysis

partly responsible for the condition when concentration is high

partly responsible for the toxic condition

partly used as a clinical antifibrillating agent

pathogen

Pear plants exposed to 2,3-butanediol-emitting bacteria were promoted in dry mass and branching

perspiration

pharmaceutical diluent for tablets and capsules

pharmacodynamic activity on the cardiovascular (e.g., antitumour effect) in experiments

pharmacodynamic activity on the central nervous systems (e.g., analgesic activity) in experiments

pharmacological activity closely resembles that of talatizamine

pharmacological activity in some anti-cancer therapies

pharmacological properties approach those of aconitine, but with minor differences in potency

pharmacology effects are similar to those of aconitine and mesaconitine but it is 5-8 times less effective, among others, in analgesic activity

pharmacology effects are similar to those of napelline. i.e., brief hypertension

pharmacology effects are similar to those of napelline. i.e., disturbed respiration

pharmacology similar to that of methyllycaconitine

phosphodiesterase inhibitor

photo-enhanced fungicide

photographic reducer and developer

photosensitising activity

phototoxic

phototoxic activity

phototoxic activity in long wavelength UV

physiological effects are closely similar to those of aconitine

phytoalexin

Phytoalexins and inducers of nitrogen fixing bacteria
phytotoxic
phytotoxic activity on leaves and pods
phytotoxin
phytotoxin responsible for the symptoms of blight
phytotoxin which infects panicles with false smut balls
phytotoxin, a fungus causing black spot disease
phytotoxin, attack seeds
phytotoxin, causing necrotic spots on the leaf
piscicidal activity
pigment
pink pigment
piscicidal
piscicidal activity
piscicidal effect
plant growth inhibiting activity
plant growth inhibitor
plant growth inhibitory activity
plant growth regulator
plant growth regulator in the transfer RNA
plant growth regulator similar to jasmonic acid

plant growth regulator, active at very low concentrations but only in the presence of indoleacetic acid

plasma protein binder, e.g., albumin
platelet aggregation inhibitor
pleasant lemon-like odour
plus antioxidant activity
pneumotoxic
pneumotoxin
poisonous
poisonous alkaloid, with an intravenous LD50 of 4 mg/kg body-weight
poisonous effects are virtually identical with those obtained with veatchine
poisonous, when taken in soluble form, causing paralysis of the nervous system
Pollinator attractants
poor antifungal activity
positive inotropic effect on the heart
positively inotropic
possess a broad-spectrum activity against experimental neoplasts
possess antifungal property
possess antitumour activity
possess curare-like properties
possess pesticidal property
possess pharmacological properties similar to those of aconitine

possess plant growth inhibitory properties by suppressing cell division and cell elongation
possible anticancer agent
possible antineoplastic activities
possible antiviral activities
possible use as a sweetener
possibly have psychotropic property
potent ability to excite
potent amoebicide
potent and relatively selective inhibitor of arachidonate 5-lipoxygenase
potent antifeedant against the larva
potent antiperoxidative activity
potent antitermite activity
potent antitumour agent
potent cyclic adenosine monophosphate phosphodiesterase inhibitor
potent hypotensive agent with characteristic action on the heart, causing irregularity and prolongation of the beat
potent inducer of hepatic epoxide hydrolase
potent inhibitor of 4-aminobutanoic acid
potent inhibitor of aldose reductase
potent inhibitor of alpha- and beta-glucosidases
potent inhibitor of beta-glycosidase
potent inhibitor of bull seminal cyclo-oxygenase activity
potent inhibitor of glycosidases
potent inhibitor of iodothyronine-deiodinase in liver microcosmal membranes
potent inhibitor of nucleotide phosphodiesterase
potent inhibitor of the enzyme xanthine oxidase
potent inhibitor of the photosynthetic enzyme ribulose 1,5-bisphosphate carboxylase
potent inhibitor of thyroid peroxidase
potent inhibitor of viral glycoprotein processing glucosidase I
potent inhibitory activity against some strains of the HIV retrovirus
potent insecticidal activity
potent may be responsible for neurological disorders feeding on Solanum leaves
potent neuromuscular poison with classical curariform activity
potent oral contraceptive, possessing 85% anti-implantation activity
potent oxytocic
Potent plasmodial activity
Potent protein tyrosine phosphatase 1B (PTP1B) inhibitory activity
potent skin irritant
potent vasoconstrictor
potential for treating AIDS
potential source of natural red food colouring
potentially useful in counteracting the damage caused by applying herbicide
potentiate effects of barbiturate

potentiate the activity of prostalidins A–C, lignans
potentiate the analgesic effects of morphine
potentiation of some hypnotics such as pentobarbital
powdered Ptaeroxylon is pungent and irritating, causing violent sneezing
powerful analgesic
powerful hypotensive agent
powerful inhibitor of pyridoxal phosphate-containing enzymes
powerful mutagen
powerful stimulant, also employed for relieving rheumatic pains and for paralysis
powerful transient hypotensive agent
powerful vesicant
precipitate steroids and proposed as an alternative to digitonin
precipitates blood calcium
precursor in the biosynthesis of leukotrienes
precursor in the biosynthesis of prostaglandins
precursor in the biosynthesis of thromboxanes
precursor of angiosperm lignin
precursor of indoleacetic acid
precursor of lignin biosynthesis
precursor of many aporphine and morphinane alkaloids
precursor of propanthiol S-oxide
precursor of serotonin
preservative
preservative for foods
presumably poisonous
prevent both initiation and promotion in the process of chemical carcinogenesis
prevent complications of diabetesmellitus
prevent endotoxin-induced shock
prevent experimentally induced granulocytopenia
Prevent fungal growth in stored corn
prevent haemorrhagic shock
principle odour (Cucumis sativus), odour threshold is 0.0001 ppm
probably act as a competitive inhibitor
probably act as antimetabolite of arginine
probably an endogeneous growth hormone
produce a significant fall of blood pressure
produce amnesia, assist the induction of anaesthesia and reduce some of its side-effects
produce autonomic effects, such as increase in blood pressure and dilatation of the pupil
produce bacterial blight symptoms in artificially infected leaves at a concentration of 6 microg/g fresh-weight
produce bradycardia
produce brief hypotension at doses of 5–15 mg/kg but no effect observed on heart rhythm and no central effects on conditioned reflexes

produce cardiac irregularity
produce central nervous system depression
produce chromosomal aberrations in cells
produce chronic liver disease
produce gross behavioural changes
produce lachrymation
produce leaf necrosis and stem collapse at a concentration of 10^{-2} M
produce moderate activation of spleen lymphocytes
produce necrotic lesions at the 1 microlevel
produce necrotic lesions, with a reddish brown border, when applied to the leaves at a concentration between 10^{-4} and 10^{-5} M
produce necrotic symptoms at 20 microg per droplet on leaves
produce neurolathyrism
produce neuromuscular block
produce peripheral vasoconstriction
produce phytoalexin
produce respiratory failure
produce selenosis, in a similar manner to selenocystathionine, as well as the syndrome known as blind staggers
produce the blue chromophore of flowers
produce tremors
produce wilting symptoms
producing respiratory paralysis
prolactin release inhibitor, preventing implantation and lactation
prolong the clotting time of fibrinogen by thrombin in high concentrations
prolong the clotting time of fibrinogen by thrombin in high concentrations (0.1–1 mM)
prolonged use leads to habituation
promote adventitious root formation
promote chlorophyll degradation
promote early embryo growth
promote elongation of coleoptile segment
promote elongation of epicotyl segment
promote elongation of hypocotyl segment
promote female flowering
promote fruit development
promote growth of light-inhibited mesocotyl
promote growth of 1st internode all organs above 1st internode it was removed
promote growth of decapitated coleoptile
promote growth of decapitated gynophore
promote growth of endosperm removed coleoptile
promote growth of leaf excised mesocotyl
promote growth of leaf excised shoot
promote haustorium formation

promote hypocotyl elongation
promote lamina inclination
promote leaf growth
promote leaf senescence by inhibiting chlorophyll synthesis
promote metabolite transport in fruit
promote metabolite transport in root
promote metabolite transport in stem
promote muscle relaxation
promote protoplast growth
promote root elongation
promote root growth
promote stem growth
promote stomatal closing
promote stomatal opening
pronounced analeptic properties
pronounced antitumour activity

propably toxic, although it doesn't yield cyanide on enzymatic hydrolysis as do other cyanogenic glycosides

properties similar to those of borrecapine
prostaglandin synthetase (enzyme of arachidonic acid metabolism) inhibitor
protect against attack
protect erythrocytes from hypotonic lysis
protect from the toxic effects of canaline
protective against invasion
protective role in *Maclura pomifera*
protein synthesis and growth regulator
protoverine is obtained by hydrolysis of protoveratrine A
provide colour in leaf
provide flavour in leaf
provide taste in leaf
provoke heavy allergic skin reactions
provoke hypertension
psychotomimetic
psychotomimetic activity including hallucinations, anxiety and perceptual distortions
psychotomimetic, due mainly to the presence of mescaline and N-methylmescaline
pungent
pungent odour
purgative
purgative activity
purgative in veterinary practice
purple pigment
purple-brown pigment
purple-red pigment

radical scavenger
raise blood pressure
Ralstonia solanacearum volatiles reduced Aspergillus flavus conidiation
react with the structural protein actin, and is severely hepatotoxic
readily oxidised to a blue pigment when Psilocybe mexicana is bruised
rearrange, in damaged bulbs of Tulipa hybrida, to a lactone, tulipalin A, which is allergenic
rearrange, in damaged bulbs of Tulipa hybrida, to a lactone, tulipalin A, which is fungitoxic
rearrange, in damaged bulbs of Tulipa hybrida, to a lactone, tulipalin B, which is allergenic
rearrange, in damaged bulbs of Tulipa hybrida, to a lactone, tulipalin B, which is fungitoxic
red fruit pigment
red pigment
reddens on exposure to light
reduce acute myocardial infarction
reduce cardiac activity
reduce cholesterol level
Reduce fat mass in obese humans
reduce in patients with parkinsonism
reduce the ability of the human immunodeficiency virus (HIV) to infect cultured cells
reduce the degree of ulceration, the free and total acidity, and the volume of gastric content
reduce the response of an electrically stimulated sciatic nerve–gastrocnemius muscle preparation
reduce time taken to run through a labyrinth
reduction of the heart frequency
reflex associated with eating and movement
reflex associated with movement and eating
regard as a beneficial dietary component for coronary heart disease
regulate bud dormancy
relatively nontoxic, compared with aconitine
relax involuntary muscle
relaxant activity
release hydrogen cyanide without the intervention of a beta–glucosidase
repellent
repellent activity
reported to have specific antiprotozoal activity
reputed to have contraceptive property
resemble pilocarpine in its pharmacological properties, but less active
reserve carbohydrate
respiratory depressant
Respiratory diseases (Asthma)
Respiratory diseases (chronic obstructive pulmonary disease)
Respiratory diseases (Cystic Fibrosis)
Respiratory diseases (Pulmonary Arterial Hypertension)
Respiratory diseases (Pulmonary tuberculosis)

Respiratory diseases (Ventilator associated pneumonia)

respiratory muscle-stimulating action

respiratory paralytic

respiratory stimulant

respiratory stimulant, with a nicotine-like activity

responsible for attracting to pollinate flowers of Orchidaceae

responsible for black patch disease (excessive salivation, diarrhoea and anorexia) by eating infected *Trifolium repens*

responsible for crooked calf disease caused by ingestion of Fabaceae plants

responsible for cyclopic malformation grazing on *Veratrum californicum*

responsible for favism, a haemolytic anaemia associated with individuals deficient in glucose-6-phosphate dehydrogenase and who have consumed *Vicia faba*

responsible for poisoning

responsible for the acute dermatitis caused in handling *Anacardium occidentale*

responsible for the antifertility activity

responsible for the bitterness

responsible for the carcinogenic action of bracken

responsible for the cathartic action of bark

responsible for the characteristic odour

responsible for the contact dermatitis of *Acacia melanoxylon* (together with acamelin)

responsible for the effects of the extract of *Paeonia suffruticosa*

responsible for the induction of leaf movements after perception of external stimulus

responsible for the insecticidal activity

responsible for the symptoms of the dying-arm disease of the grapevine

responsible for the syndrome known as vomiting sickness, characterised by violent retching, vomiting, convulsions and coma (may be fatal)

responsible for the toxicity of cycad palms(moved)

responsible for the toxicity of the plant after ingestion, leading to paralysis and finally death

responsible for toxic effect

responsible in part for the toxicity of *Thermopsis montana*, when it is grazed

Respiratory diseases (Bronchiectasis, cystic fibrosis, or immune suppression)

restrict invasion of tubers to a mycorrhizal relationship

retard circulation by vascular constriction

retard flower senescence

retard fruitlet abscission

retard leaf senescence

retard petiole abscission

reversal of abscisic acid inhibition of coleoptile growth

reverse abscisic acid inhibition of growth in germinating axes

reverse hypoglycaemia and ketosis caused by starvation

reversible loss of scalp and body hair a week or two later

rubefacient

safety laminations use ricinolate plasticisers
salivation and lachrymation
scarlet flower pigment
scarlet pigment
scarlet to pink flower pigment
Schisandra chinensis fruit is used as an antitussive drug
Schisandra chinensis is used as a treatment for ulcers
sedative
sedative action
sedative activity
sedative effect
sedative property
sedative property, but not a hallucinogen
seed germination inhibiting activity
seeds do not contain strychnine
selectively inhibit 5-lipoxygenase of cultured mastocytoma cells
sequestered and stored by *Battus archidamus*
serve as a fungicide in butter of *Myristica otoba*
severe teratogen
sex attractant
show a parasympathetic stimulant action
show antitumour activity
show bronchodilatory action
show hypotensive property
show increasing coronary flow in isolated heart
show potent cytotoxic activity against nasopharyngeal cells, however lack antitumour property
show some anthelmintic activity
show toxic symptoms in leaf when applied at a concentration of 10^{-8} to 10^{-9} mol/dm³
show uterine stimulant activity
show weakly hypotensive ionotropic action
siderophore
significant antimicrobial activity
significant antitumour activity
significant cytotoxic activity
significant effect on uterine contractability
Significant reduction in upwind flight of *Aedes aegypti* to attractive human hands (repellent)
silage treatment resists the growth of mycotoxins
similar activity to hyoscyamine
similar biological activities to caribine
similar in activity to physostigmine, but not in clinical use
similar in effect to bufotenine
similar pharmacological activity that of sparteine but lower of lower potency
similar pharmacological properties to those of methyllycaconitine

similar to cathine
similar to mescaline
similar to safrole
similar toxicity to its higher homologue hypoglycin
skeletal muscle relaxant
skeletal muscle relaxant activity
skeletal muscle relaxant used to paralyse muscles during surgical operations
Skin and Connective Tissue (Chronic wounds)
skin irritant
skin irritant and sensitiser
slight antimicrobial activity
slight central nervous system depression
slight hypotensive activity
slight peppermint odour
slight photosensitising activity
slightly cytotoxic to ascites tumour cells in vitro
slightly hepatotoxic
slightly toxic
slowing of the heart
small doses increase the contractions of a intestine preparation
small doses stimulate respiration
smooth muscle relaxant
Solanum sodomium is lethal
some activity in the ileum assay with a response at a concentration of $2 \times 10^{-4} M$
some antihistamine activity
some hypotensive states
some mutagenic activity
some piscicidal activity
some toxicity, LD50 1.8 g/kg body-weight
some uncertainly exists as to whether or not it is orally toxic
some uses in biochemical research
sometimes used as a flavouring agent
source of cevine by epimerisation
source of veratridine (weakly hypertensive) by methoxybenzoylation
spasmolytic
spasmolytic action
spasmolytic activity
spasmolytic agent
spasmolytic effect
spasmolytic principle
specific inhibitor of exo-1,4-alpha-glucosidase
spermicidal property
spore-settlement suppressive activity at a concentration of 1 microg/ml

starting base for synthesising medicinally useful steroids
starting material for the manufacture of cocaine
starting point for synthesis of steroidal drugs
stereospecific gamma-aminobutyric acid receptor antagonist
sterically undefined tetrahydrocannabinol has exhibited antiviral activity
stimulate cell division with its stimulation of growth
stimulate central nervous system activity at low doses
stimulate coleoptile growth in deep-water
stimulate differentiation of secondary xylem fiber
stimulate egg laying
stimulate feeding
stimulate fruit senescence
stimulate fruit set
stimulate germination
stimulate glucagon secretion in patients with pancreatitis
stimulate heart beat at lower concentrations
stimulate hepatic regeneration
stimulate intestinal peristalsis
stimulate leaf senescence
stimulate liver regeneration
stimulate phagocytose at low dosage
stimulate phagocytosis
stimulate platelet cAMP levels
stimulate prostaglandin synthetase
stimulate respiration
stimulate respiration slightly
stimulate RNA synthesis in liver nuclei in vitro
stimulate smooth muscle
stimulate the central nervous system

stimulate the parasympathetic nerve endings, increasing thereby salivatory, gastric and lachrymal secretions

stimulate the release of growth hormone from the pituitary gland
stimulate the uterus
stimulate tuberisation of tissue in vitro at concentrations of 3×10^{-8} M
stimulate uterus at small amounts
stimulating effect on central nervous system
stimulating isolated intestine
stimulating isolated uterus
storage carbohydrate
stored for protection by feeding on *Senecio jacobaea*
stress metabolite
stress prevention activity in vivo
stress-reducing activity

strong acid taste, and contributes to the acidity of grapes and of wines
strong acid which, when ingested, cause a collapse of the circulatory system
strong acid with acute toxicity
strong acid, but less toxic than oxalic acid
strong anticholinesterase activity
strong antifungal activity
strong antigonadotropic activity
strong antihepatotoxic activity
strong antihepatotoxic activity against phalloidin poisoning
strong anti-inflammatory activity
strong attractant
Strong axillary odor formation
strong central nervous system depressant
strong curarising agent
strong cytotoxic activity against carcinomas
strong fishy odour
strong inhibitor of platelet aggregation
strong inhibitor of RNA synthesis
strong inhibitory activity against platelet aggregation
strong irritant to eyes and skin
strong liver-protective activity
strong muscle contractant
strong mutagenic activity
strong parasympathomimetic agent
strong radical scavenger
strong skin irritant
strong tetanic poison
strong vagolytic agent
strongly antibiotic
strongly inhibit lens aldose reductase
strongly inhibit platelet aggregation
strongly phototoxic
strongly purgative
Styrax is used as a parasiticide in veterinary medicine
Styrax is used as a topical protectant
Styrax is used for manufacturing fumigating pastiles and powders
Styrax is used in perfumery
substitute for tartaric acid in beverages and baking powders
suggested as a therapeutic treatment for cystic fibrosis
sulfonamide antagonist
suppress aggressive responses to electrical stimulation
supress growth of coleptiles in vitro
suppressive action in granulocyte test systems in higher doses

suppressive action in lymphocyte test systems in higher doses
sweet principle
sweet rose odour
sweet taste
sweet taste with bitter after-taste
sweet tasting substance, about 12 times sweeter than sucrose
sweet tasting substance, about 20 times sweeter than sucrose
sweet tasting syrup
sweetener
sweetener for diabetics, mainly converted to carbon dioxide without appearing as glucose
sweetener, about 70% as sweet as sucrose
sweetener, twice as sweet as glucose
sympathomimetic activity with direct and indirect effects on alpha-adrenergic receptors
sympathomimetic activity with direct and indirect effects on beta-adrenergic receptors
sympathomimetic agent with indirect adrenergic activity

symptoms include nausea, vomiting, convulsions, colic, severe diarrhoea, then apparent recovery for up to 5 days, followed by hepatitis, renal failure, coma and vascular collapse

symptoms of poisoning occur within 30–120 minutes of ingestion
synergist of gibberellic acid in inducing elongation of hypocotyl
synergistic activity to insecticides, e.g., xanthotoxin
synergistic activity with pyrethrin and the pesticide sevin
synergistic effect with acetylcholine on ileum
systolic depressant
taken up for defence by larvae, which feed on *Teline monspessulana*
tans proteins
teniicide
teratogen
teratogenic
teratogenic activity
teratogenic after eaten *Conium maculatum* during pregnancy
termite repellent
tetanic action

the (–)-form found in the exudate of *Eucalyptus hemiphloia* is used as an astringent and antidiarrhoeal agent

the acetyl derivative is widely used as a mild painkiller
the acute toxicity is about three times that of lycoctonine
the acute toxicity is about twice that of talatizamine
the aglycon shows antibacterial activity
the aglycon shows anti-inflammatory activity
the aglycon shows antitumour activity
the aglycone is 4-(methylsulfinyl)butylisothiocyanate
the aglycone is erucin
the aglycone, erysoline, has antibacterial activity

the aglycone, erysoline, has antifungal activity

the aglycone, erysoline, is cytotoxic

the anthocyanin extract of *Vaccinium myrtillus* berries, which contains 3-galactosides of cyanidin has anti-inflammatory activity

the bark of *Magnolia* has depressant effects on the central nervous system

the bark of *Magnolia* is used for gastrointestinal complaints

the bark of *Magnolia* is used for neurosis

the blood pressure of anaesthetised is lowered by doses of 5–15 mg/kg

the breakdown product is isopropylisothiocyanate

the cause of poisoning following ingestion of *Laburnum* seeds

the chloride shows antimicrobial activity

the coenzyme of the galactowaldenase system which catalyses the conversion of galactose 1-phosphate into glucose 1-phosphate

the diacetate is used as an anti-inflammatory drug

the diacetate is used as an antirheumatic drug

The Digestive System (Cholera)

The Digestive System (Fetor hepaticus)

The digestive system (Gastrointestinal disease)

The Digestive System (Irritable Bowel Syndrome)

The Digestive System (Liver diseases, Fetor hepaticus)

The Digestive System (Ulcerative colitis)

the drug of addiction is the diacetate, heroin

the ether extract of the crude drug derived from *Magnolia* bark has muscle relaxant activity

the ether extract of the crude drug derived from *Magnolia* bark has sedative activity

the extract of *Magnolia salicifolia* has an inhibitory effect on histamine release

the extracts of the bark of *Litsea turfosa* show antifungal activity

the free acid has been used as a food preservative

the free acid has been used as a topical keratolytic

the free acid has been used in medicine

the glycosylated cyanhydrin structure is lacking, for generating hydrogen cyanide spontaneously the epoxy ring has to be hydriylsed by an epoxyhydrolase

the hydrochloride has been used as an agricultural pesticide, LD50 intraperitoneally 42 mg/kg body-weight

the hydrolysis product is 2-phenylethylisothiocyanate

the hydrolysis product is 3-(methylsulfinyl)propylisothiocyanate

the hydrolysis product is 3-(methylthio)propylisothiocyanate

the hydrolysis product is 5-(methylthio)pentylisothiocyanate

the hydrolysis product is but-3-enylisothiocyanate

the hydrolysis product is ethylisothiocyanate

the hydrolysis product is methyl isothiocyanate

the hydrolysis products are benzyl isothiocyanate and benzyl thiocyanate

the hydrolysis products is an unstable isothiocyanate which liberates free thiocyanate, SCN-

the LD50 after intravenous injection is 2.7 mg/kg body-weight

the main lachrymatory principle, which is produced by the action of alliinase when cut or bruised

the most characteristic symptom of poisoning seems to be respiratory depression, which is the primary cause of death

the most important pungent principle of *Zingiber officinale*

the most toxic of the veatchine-like alkaloids

the pharmacology most closely resembles that of aconitine in its spectrum of effects, but it has only about half that alkaloid's toxicity

the pomace and lees of *Vitis*, which contains malvin, is used as a natural food colouring

the presence of amines in floral volatiles is associated with fly pollination

the racemate is a mydriatic

the rhizomes of *Alpinia galanga* are used as a spice

the rhizomes of *Alpinia galanga* are used for treating dysentery and problems of indigestion

the rhizomes of *Alpinia galanga* are used for treating fungal skin infections

the ribalinium salt is moderately active

the second most important pigment

the seeds are used in veterinary medicine as a laxative

the seeds are used in veterinary medicine as a teniafuge

the seeds are used medicinally, being astringent

the seeds are used medicinally, being diaphoretic

the seeds are used medicinally, being mitotic

the seeds are used medicinally, being teniacide

the simplest of all known phytotoxins

the sodium salt shows analgesic and antirheumatic activity

the stem bark extract of *Goniothalamus giganteus* is antileukaemic in vivo

the symptoms of poisoning generally resemble those of aconitine

the toxicity is relatively high in comparison with other alkanolamines of either the C19 or C20 type

the toxicity of *Strychnos nux-vomica* is due to strychnine and not to this alkaloid

the trans-isomer acts as an oviposition stimulant

the trans-isomer may also reduce larval growth

The urinary system (Uraemia/kidney failure)

the urushiols are used as anti-allergic agents in hyposensitisation therapy

therapeutic activity

To treat antiandrogenic

To treat hypercholesterolemia

too toxic

too toxic to be used in medicine

topical anaesthetic

topical antipruritic activity

topical antipruritic agent in veterinary practice

topical treatment of afflictions as asthma

topical treatment of afflictions as coughs and wounds
topical treatment of afflictions as febrile colds
topical treatment of afflictions as leprosy
topical treatment of afflictions as ulcers
toxic
toxic alkaloid
toxic associated with its ability to chelate Cu²⁺ and Fe²⁺ ions
toxic at a concentration of 0.007% in the diet
toxic by feeding, causing symptoms similar to the genetic disorder mannosidosis, and eventually death
toxic constituent of tubers of *Solanum tuberosum*
toxic doses produce respiratory paralysis
toxic effects include weight loss, general malaise and eye inflammation
toxic precursor of the hallucinogenic principle, muscimol
toxic properties are similar to those of cycasin
toxic symptoms include gasping, convulsions and respiratory failure
toxic to larvae
toxic when applied at concentrations of 10⁽⁻³⁾ to 10⁽⁻⁵⁾ M
toxic, affect the central nervous system
toxic, and carry the *Schistosoma* parasite
toxic, LD50 19.4 mg/kg body-weight
toxic, LD50 26 mg/kg
toxic, LD50 4.1 mg/kg body-weight
toxic, LD50 500 mg/kg body-weight
toxic, LD50 intraperitoneally 10.9 mg/kg body-weight
toxic, LD50 intraperitoneally 2.8 mg/kg body-weight
toxic, LD50 intraperitoneally 29.5 mg/kg body-weight
toxic, LD50 intraperitoneally 530 mg/kg body-weight
toxic, LD50 intraperitoneally 6 mg/kg body-weight
toxic, LD50 intraperitoneally in 250 mg/kg body-weight
toxic, LD50 intravenously 15–20 mg/kg body-weight
toxic, LD50 intravenously 4.8 mg/kg body-weight
toxic, LD50 intravenously 58.6 mg/kg body-weight
toxic, LD50 intravenously 80 mg/kg body-weight
toxic, LD50 orally 10 mg/kg body weight
toxic, LD50 orally in 1.2 g/kg body-weight
toxic, LD50 orally in 4.75 g/kg body-weight
toxic, less poisonous but much quicker acting than amanitin, 1–2 h
toxic, with a digitalis-like effect on the heart
toxic, with an LD50 on intravenous injection of 3.3 mg/kg body-weight
toxicity
toxicity characterised by ataxia, prostration and loss of muscle control
toxicity not established, but suspected to be hepatotoxic

toxicity not yet established, but hepatotoxicity suspected

toxicity of the seeds of *Prunus amygdalus* var. *amara* is 100 mg/kg, and of *Prunus armeniaca* is 20–80 mg/kg

toxicity produced in infected *Arachis hypogaea*, LD50 in one-day 20 mg/kg body-weight

toxicity symptoms include vomiting, diarrhoea, hallucination and coma, oral ingestion of 2.8 mg/kg is toxic

toxicity, the host intermediate of *Schistosoma*

toxin causing methaemoglobinaemia

toxin, causing severe pain and a reddish oedema on hands and feet, if ingested

trace constituent

tranquiliser

tranquilizer

tranquilizer, in clinical usage

tranquillising activity

tremorigenic agent of low toxicity

trigger of infection by crown gall disease, *Agrobacterium tumefaciens*

trigger off heat production required for successful fly pollination

trigger transfer of t-DNA in *Agrobacterium tumefaciens*, thus inducing virulence

Triggering growth promotion via volatile chemical signals

Trypanocidal

trypanocidal in vitro

trypanosomal activity

tuberculostatic

tuberculostatic activity

tuberculostatic activity in vitro

tuberculostatic agent

tuberisation hormone

tumour inhibiting activity

tumourigenic

tumour-inhibiting activity

tumour-inhibitor in vitro

tumour-inhibitory property

unconfirmed

under consideration for the treatment of Alzheimer's disease

undergo clinical trials for treating breast cancer

undergo decarboxylation in vivo, when *Amanita muscaria* is eaten, and muscimol excreted in the urine

undergo stepwise oxidation to lysergic acid, which forms a peptide linkage with a variety of amino acids, to yield the therapeutically useful ergot alkaloids

unpleasant faecal odour

unripe seeds cause severe gastrointestinal irritation and sometimes death when eaten

urinary anti-infective activity

used as a gargle

used as a biochemical tool in studying the mode of action of anaesthetics, because of its effects on liposome formation

used as a bitter stomachic

used as a bitter stomachic agent

used as a bitter tonic

used as a bittering agent

used as a cardiovascular agent

used as a carminative

used as a carminative in veterinary practice

used as a catalyst for the polymerisation of olefins

used as a children's laxative

used as a choleric and slimming aid

used as a coccidostat in veterinary practice

used as a colourant in food

used as a colouring agent in the food industry

used as a component in the manufacture of alkyd resins

used as a component of varnishes

used as a coronary vasodilator

used as a counter-irritant

used as a cross-linkage agent for epoxy resins

used as a decalcifier for hides

used as a developer in photography

used as a diagnostic agent for kidney function

used as a drug for stimulating muscle activity

used as a drying oil for varnishes

used as a drying oil ingredient

used as a dye

used as a dye, acid (yellow)-base (red) indicator

used as a febrifuge (*Alstonia scholaris* bark)

used as a fish poison

used as a flavour compound

used as a flavour enhancer

used as a flavour in foods and liqueurs

used as a flavouring

used as a flavouring agent

used as a flavouring agent in confectionery, beverages, foods and perfumery

used as a food

used as a food flavour

used as a food preservative

used as a fungicide

used as a gas odourant

used as a haemostatic agent in veterinary therapy

used as a haemostatic in obstetrics
used as a herbal medicine to treat inflammation
used as a herbal medicine to treat liver complaints
used as a herbal medicine to treat skin infections
used as a horticultural insecticide
used as a humectant
used as a jet fuel additive
used as a laxative
used as a local anaesthetic
used as a local analgesic in rheumatic conditions
used as a lubricant
used as a lubricant for cosmetics, employed in pharmaceuticals, notably enteric pills, ointments and suppositories
used as a mild expectorant in folk medicine
used as a natural dye
used as a nutrient
used as a nutrient in modified milk
used as a parenteral supplement of sugar for diabetes
used as a pediculicide
used as a perfume of ingredient
used as a pesticide
used as a pharmaceutical aid
used as a pigment
used as a pigmentation agent in the treatment of leukoderma (vitiligo) and psoriasis
used as a plasticiser for buna rubber and plastics
used as a poison
used as a popular medicine in the treatment of the asthma
used as a popular medicine in the treatment of the asthma, and in the healing of wounds
used as a popular medicine in the treatment of the common cold
used as a popular medicine in the treatment of the coughs
used as a pre-operative medication to sedate, reduce secretions
used as a protective coating of fruits
used as a reagent for aluminium and zinc
used as a reagent for pentoses, lignin, sugar etc.
used as a reagent for pentoses, lignin, turpentine oil, and free HCl in gastric juice
used as a red dye for cosmetics and food
used as a remedy against leprosy and various skin diseases
used as a remedy for skin disorders in herbal medicine
used as a repellent
used as a rodenticide
used as a rubefacient
used as a sclerosing agent in the treatment of varicose veins
used as a sedative in folk medicine

used as a soft-soap drier
used as a solvent
used as a solvent for oils
used as a stain in microscopy
used as a stain in the manufacture of ink
used as a starting material for C-nor-D-homosteroids
used as a starting point for the synthesis for various hydroxy derivatives and of the 3-epimer or the 20-epimer
used as a substitute for glucose in parenteral nutrition (note risk of lactic acidosis)
used as a sweetener
used as a synonym of beta-sitosterol, a plant steroid
used as a synthetic precursor
used as a tea or for chewing owing to the presence of ephedrine-like bases
used as a thickening agent for lubricating oils
used as a thickener for greases
used as a tonic
used as a tool in biochemical research
used as a topical antipruritic
used as a topical antiseptic
used as a trail pheromone
used as a tranquiliser
used as a urinary antiseptic
used as a UV screen
used as a weak sedative
used as an acid-base indicator
used as an acidulant for foods
used as an acidulating agent in foods
used as an additive to dry cleaning soaps for textile finishing
used as an additive to Turkey red oil
used as an adjuvant in the treatment of liver disease
used as an agricultural fungicide
used as an amoebicide
used as an anaesthetic in dentistry
used as an analgesic
used as an anthelmintic
used as an anticholesterolaemic
used as an antidote for opium poisoning
used as an antifoaming agent
used as an antihypercholesterolaemic drug
used as an antimicrobial agent in veterinary medicine
used as an antioxidant in oils, fats, hydrocarbon fuels and lubricants
used as an antiseptic
used as an antiseptic in dentistry

used as an arrow poison (root bark)
used as an attractant
used as an emetic
used as an emmenagogue
used as an emulsifying agent
used as an expectorant
used as an external parasiticide
used as an ingredient in suntan preparations
used as an ingredient of arrow poisons
used as an ingredient of drying oils and soaps
used as an insecticide
used as an insecticide in veterinary medicine
used as an intermediate for dyes
used as an intermediate for fungicides
used as anthelmintic agent
used as antimalarial agent
used as antimicrobial agent
used as antipyretic agent
used as assess intestinal permeability
used as attractants in field traps
used as chlorophyll a
used as cytotoxic agent
used as expectorant
used as flavours
used as for amurensine
used as insecticides
used as laxative
used as lubricant
used as poisons
used as the coagulation of rubber latex
used as tonic
used both as a perfumery
used clinically
used clinically to treat acute myelocytic leukaemia
used clinically to treat depression
used clinically to treat mental disorders associated with this since, unlike serotonin, it crosses the blood–brain barrier
used clinically to treat post–partum haemorrhage
used commercially as a condensing agent in syntheses of polyamides and intermediate for dyes
used commercially as a preservative in pharmaceuticals and cosmetics
used commercially as a purgative
used commercially as a repellent
used commercially as a synergist for the flavour additive, monosodium glutamate

used commercially in artificial fruit essences
used cosmetically as a skin-bleaching agent
used extensively as a cough suppressant
used extensively as a spasmolytic
used extensively for diarrhoea
used extensively for pain
used extensively for pain relief, especially in terminal care
used extensively in cough medicines
used for a flavouring foods
used for bleaching of leather and straw
used for cake decoration (Angelica, taste of Benedictine)
used for cleaning metals and wood
used for color stability in poly(vinyl chloride) and acrylic resins
used for curing tobacco
used for detection of boron
used for dropsical cases
used for dyeing
used for dyeing fabrics
used for dyeing leather
used for dysentery (roots are boiled)
used for flavouring
used for flavouring (very young leaves)
used for flavouring and food and beverages
used for flavouring confectionery
used for manufacture of dyes
used for manufacture of dyes and explosives
used for preserving botanical and biological specimens
used for preserving foods
used for skin diseases
used for staining of leather
used for tanning
used for textile finishing

used for the manufacture of alkyd and polyester resins, nonmigrating plasticisers and synthetic polyamide fibers

used for the manufacture of artificial resins, pharmaceutical excipients and plasticisers
used for the manufacture of esters in the perfume industry
used for the manufacture of vanillin
used for the preparation of curcuma paper
used for the reduction of the cholesterol saturation index in the treatment of gallstones
used for the treatment of chronic constipation
used for the treatment of diseases resulting from disorders of vascular permeability and fragility
used for treating chronic dermatoses
used for treating gastro-intestinal disorders

used for various type of diarrhea
used for various type of fever
used for various type of urinary diseases
used for waterproofing leather
used for waterproofing textiles
used formerly as an antineuralgicum but now rarely used internally
used in a variety of disorders to increase cerebral blood circulation
used in alkyd resin manufacture
used in anaesthesia
used in analytical chemistry for separating racemic mixtures
used in anti-smoking preparations
used in biochemical research
used in biochemical research and in industry to inhibit enzymatic browning
used in bronchial medicines
used in cases of hepatic dysfunction and cholelithiasis
used in cellulose acetate butyrate manufacture
used in chemical syntheses
used in chemical synthesis
used in cherry and vanilla flavours
used in chewing gum

used in combination with linoleic and linolenic acids to treat a fat deficiency associated with vitamin F

used in corrosion inhibitors
used in cosmetics
used in dentifrices, odour reminiscent of camphor and peppermint
used in dentistry
used in diabetes
used in eye drops for healing alkali burns
used in eyedrops as a hypertonic agent in the reduction of corneal oedema
used in flavours
used in folk medicine as narcotics
used in folk medicine as sedatives
used in folk medicine for narcotic purpose
used in folk medicine for sedative purpose
used in foods as neutralising agent, sequestrant and buffer
used in herbal medicine for the treatment of skin disorders
used in hypoglycaemia
used in Indian medicine in the treatment of rickets
used in ketosis to counteract hepatotoxins
used in lipsticks and other cosmetics
used in lung

used in many proprietary preparations containing aspirin and paracetamol to enhance analgesic activity

used in mouth washes
used in native medicine as a laxative
used in native medicine as a tonic
used in organic syntheses
used in organic synthesis
used in perfumery
used in perfumery and toilet soaps
used in perfumery because of its floral odour
used in perfumery to impart an orange-blossom-like odour
used in perfumery, particularly in rose perfumes
used in perfumes
used in photography
used in plasticisers
used in red varnishes
used in soap perfumes
used in some skin antibiotic preparations
used in some surfactants
used in stabilisers
used in sunscreen lotions and creams
used in the bread industry for growth inhibition
used in the casting of phenolaldehyde resins
used in the cosmetics industry
used in the flavouring industry under the name 'pear ester'
used in the flavourings
used in the food industry
used in the food industry as an acidulant
used in the investigation of folate deficiency
used in the manufacture of acid and chrome dyes for wool
used in the manufacture of alkyd resins, aluminium and zinc stearates, and candles
used in the manufacture of barbiturates
used in the manufacture of cosmetics and toilet preparations, yields azelaic acid on alkali cleavage
used in the manufacture of dyes
used in the manufacture of esters for artificial fruit flavours
used in the manufacture of flavours
used in the manufacture of heliotropin
used in the manufacture of hexyl esters and phenols
used in the manufacture of itaconic acid
used in the manufacture of liqueurs
used in the manufacture of perfume chemicals
used in the manufacture of plastics (notably nylon-6,6), resins and urethane foams
used in the manufacture of polyamides, and polyesters
used in the manufacture of polyhydric alcohols and synthetic resins

used in the manufacture of sedatives

used in the manufacture of soaps

used in the manufacture of varnishes

used in the paint industry as a drying oil

used in the perfumery and soaps

used in the preparation of biotin by biosynthesis with fungi and bacteria

used in the preparation of the sweetening agent aspartame

used in the production of alkyd resins, cocoa butter substitutes, flavourings, margarine and soaps

used in the same way as nicotinic acid to prevent pellagra, but has no vasodilator action or effect on serum lipids

used in the synthesis and biosynthesis of other alkaloids, such as vindoline, vincamine and vinblastine

used in the synthesis of cuminaldehyde thiosemicarbazone, which has antiviral activity

used in the synthesis of esters for flavours

used in the synthesis of esters for perfumes

used in the synthesis of vinblastine, of which it constitutes half the molecule

used in the synthesis of vitamin A

used in the treatment of eczema

used in the treatment of glaucoma

used in the treatment of hepatic encephalopathy

used in the treatment of hiccups

used in the treatment of hypothermia

used in the treatment of leukoderma (vitiligo) and psoriasis, but less effective than psoralen

used in the treatment of nervous diseases

used in the treatment of paracetamol overdose

used in the treatment of severe alcohol poisoning

used in the treatment of vomiting in pregnancy

used in the veterinary medicine

used in the perfumes

used in veterinary practice

used in veterinary practice as disinfectants

used in veterinary practice as local antiseptics

used in veterinary practice as parasiticides

used in waxes

used in wound healing

used industrially as a modifier for plastic fiber

used internally as a carminative and gastric sedative

used medically in the treatment of paralysis following infectious disease

used medically to improve liver function in alcoholism

used medically to improve liver function in hepatitis

used medicinally against capillary fragility and varicosis

used medicinally as a vasodilatory agent

used medicinally for its emetic
used medicinally for its expectorant
used occasionally in uraemia and chronic renal failure
used particularly as an antispasmodic, for motion sickness
used to aid detoxification in cases of poisoning by substances which block the thiol groups of some enzymes
used to assist the absorption of drugs through the skin, but is mildly irritating
used to attack other fungi
used to break emulsions
used to counteract gastric hyperacidity combined with antacids
used to impart a pungent taste to brandy
used to improve cerebral blood circulation
used to induce polyploidy
used to mask odours of industrial products
used to modify oriental perfumes
used to muscular rigidity
used to Parkinson's disease
used to reduce cerebral oedema
used to reduce cerebrospinal pressure
used to reduce gastric irritation caused by aspirin
used to relieve the pain of acute gout
used to treat alcoholism and mental deficiency
used to treat ammonia intoxication
used to treat amoebic dysentery, despite the gastrointestinal effects
used to treat cerebral disorders, including coma
used to treat deficiency states, such as pyridoxine-dependent convulsions of infancy and some types of depression and pre-menstrual syndrome, and those due to drug therapy, e.g., during isoniazid treatment of tuberculosis
used to treat depression
used to treat herpes simplex lesions
used to treat hyperammonaemia
used to treat migraine
used to treat Parkinson's disease, a neurological disorder characterised by tremors, rigidity and hypokinesia
used to treat peripheral vasomotor collapse
used to treat pernicious anaemia
used to treat soil, prior to planting *Allium cepa*, to reduce the chance of fungal infection
used to treat symptoms of Parkinson's disease
used to treat the congenital condition homocystinuria
used to treat vascular disorders, e.g., chilblains, frostbite, and Meniere's disease
used topically as a component of many suntan preparations
used topically in hypertensive glaucoma
used widely for the prophylaxis and treatment of bronchospasm associated with asthma

used widely for the prophylaxis and treatment of bronchospasm associated with emphysema and chronic bronchitis

used widely in brewing, and in the food industry

useful antidote in the treatment of the toxicity

useful anti-HIV activity, preclinical development in progress

useful antitumour agent, with activity against lymphocytic leukaemia in vivo at a concentration of 1.4 mg/kg

useful as a premedication before anaesthesia

useful in the treatment of tumours

usually hydrolysed as a crude extract and converted to cocaine

uterine stimulant

uterine stimulant activity

uterotonic

uterotonic effect

utilised for defence against predation

utilised for pheromone production

UV shield

vasodilating action

vasodilator

vasodilator effect

vasodilatory

vasodilatory activity

vasodilatory agent, used in medicine

Vasorelaxant activity

Veratrum album has shown teratogenic activity

Veratrum album is a very poisonous plant which has been used in the past as an arrow poison

Veratrum alkaloids are hypertensive

Veratrum alkaloids may cause nausea

Veratrum alkaloids show evidence of teratogenicity

Veratrum viride extracts have veterinary use as circulatory depressants

Veratrum viride extracts have veterinary use as emetics

Veratrum viride extracts have veterinary use as parasticides

vermifuge

very bitter

very bitter taste

very mildly toxic

very poisonous, 10–15 times more toxic than phalloidin

very potent and quick acting poison

very sweet taste

very toxic

very toxic, causing convulsions and considerable mortality when injected

viable starting material for producing adrenocortical and glucocortical steroids, which are used as anti-inflammatory agents

viable starting material for producing adrenocortical and glucocortical steroids, which are used for contraception

violet pigment

vitamin or enzyme co-factor

vitamin, co-enzyme

vitamine or enzyme co-factor

Volatiles from skin bacteria attract mosquito *An. Gambiae* s.s.

weak activity against HeLa-cell proliferation

weak analgesic

weak analgesic action

weak antibacterial activity

weak antibiotic activity

weak anticancer activity

weak antifungal activity

weak antifungal property

weak antimicrobial activity

weak antimicrobial agent

weak antipyretic action

weak antitumour activity

weak antitumour agent

weak antiviral activity against herpes simplex

weak central nervous system depressant

weak curarising agent

weak mutagenic activity

weak narcotic

weak neuromuscular blocking agent

weak pain relieving activity

weak parasympathomimetic

weak sedative action

weak smooth muscle stimulant

weak tranquilising effect

weak tumour-inhibiting activity compared with other bisbenzylisoquinolines

weakly active against spore germination

weakly active as a cardiac depressant

weakly analgesic

weakly anti-inflammatory

weakly sedative

when *Allium sativum* is crushed, converted enzymatically to allicin

when fresh plants are bruised, it is converted to protoanemonin, a vesicant oil with an acrid taste

when released from roots of *Allium cepa* into the soil, it stimulates germination
wide range of pharmacodynamic activities although only a few have commercial use
wide ranging parasympathetic activity when taken internally
widely used as a precursor in synthesis of organic compounds
widely used in neurological research
widely used in the food industry as a bittering agent, e.g., in bitter lemon drinks
widely used to relieve symptoms of bronchial and nasal congestion
yellow colouring matter of root
yellow flower pigment
yellow in colour
yellow pigment