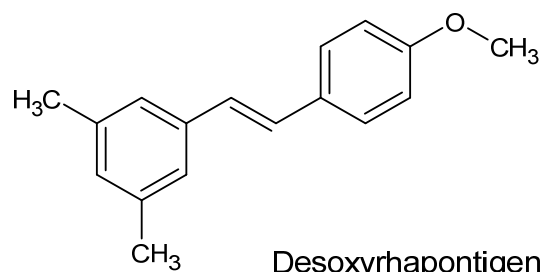
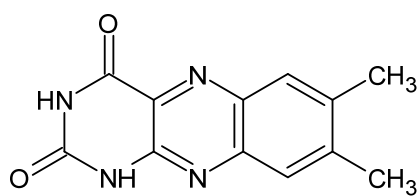


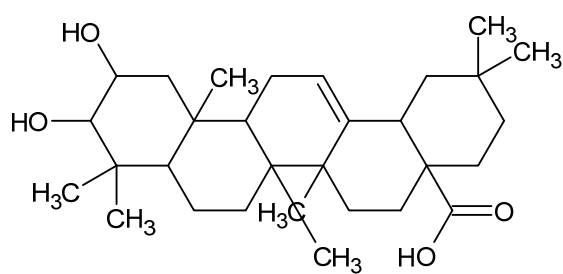
Alisol-B (1)



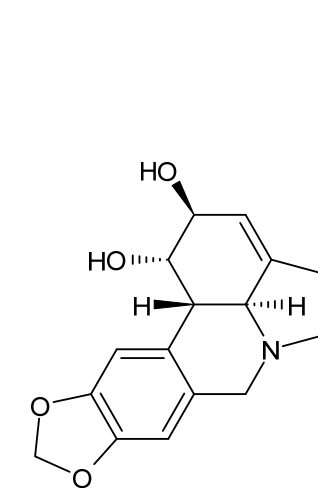
Desoxyrhapontigenin (2)



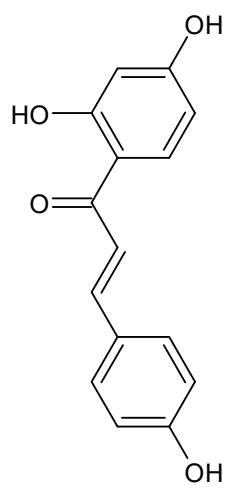
Lumichrome (3)



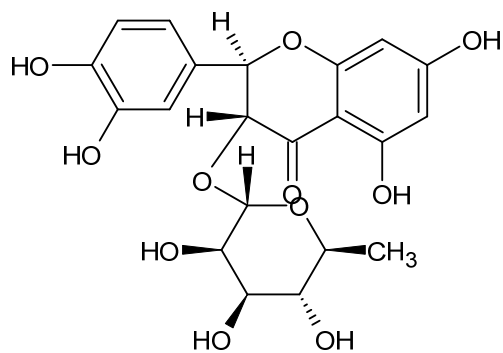
Maslinic acid (4)



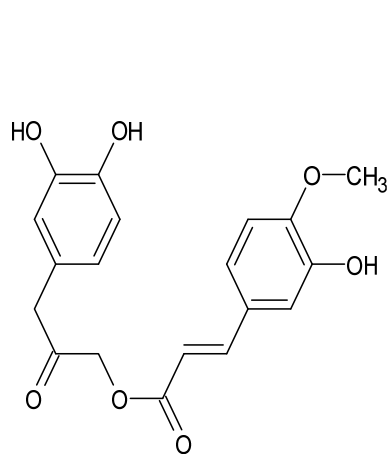
Lycorine (5)



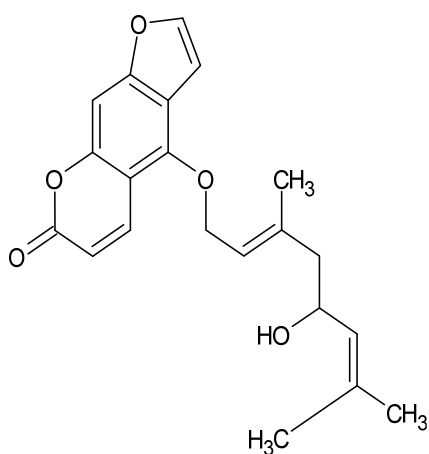
Isoliquiritigenin (6)



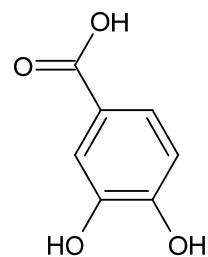
Astilbin (7)



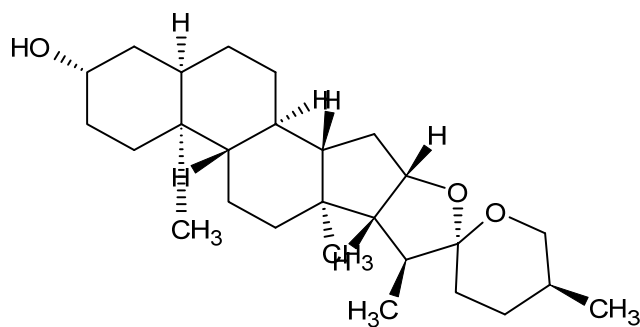
Cimiracemate A (8)



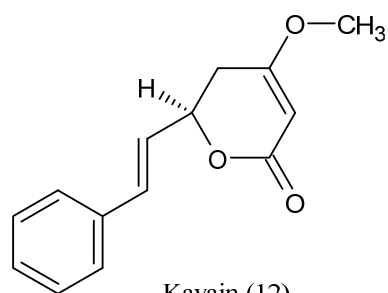
Notopterol (9)



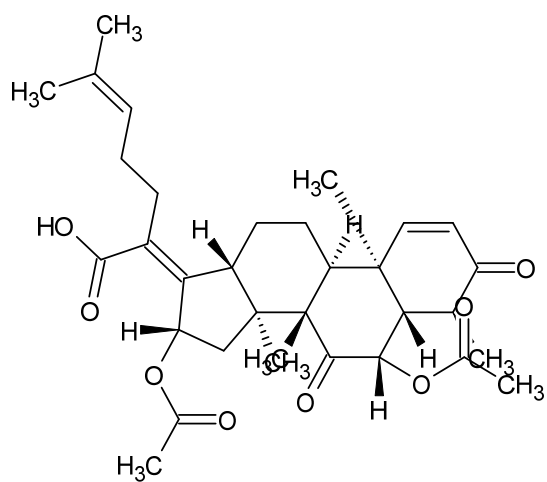
Protocatechuic acid (10)



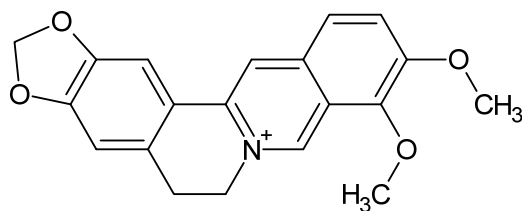
Sarsasapogenin (11)



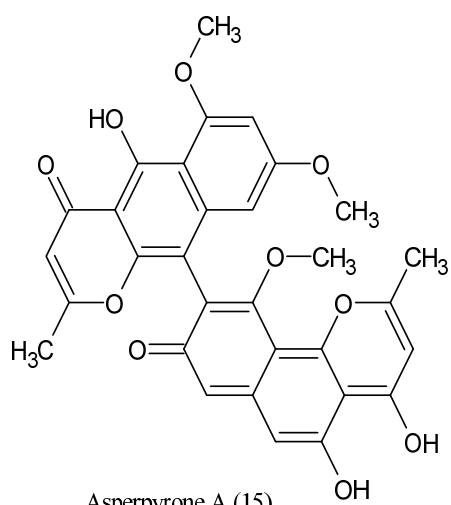
Kavain (12)



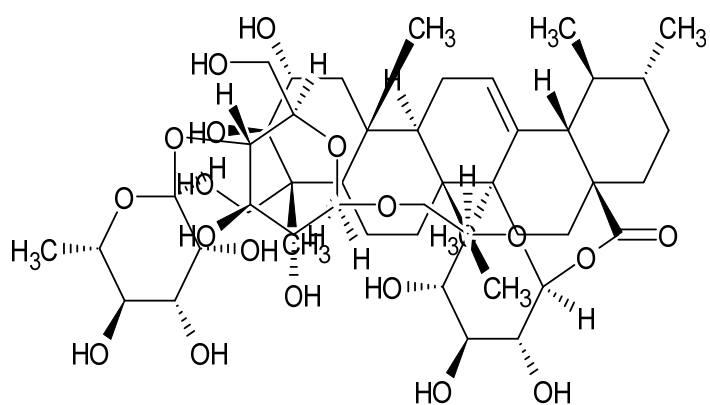
Helvolic acid (13)



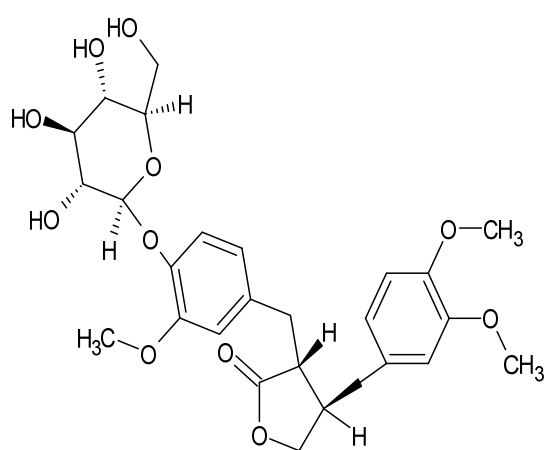
Berberine (14)



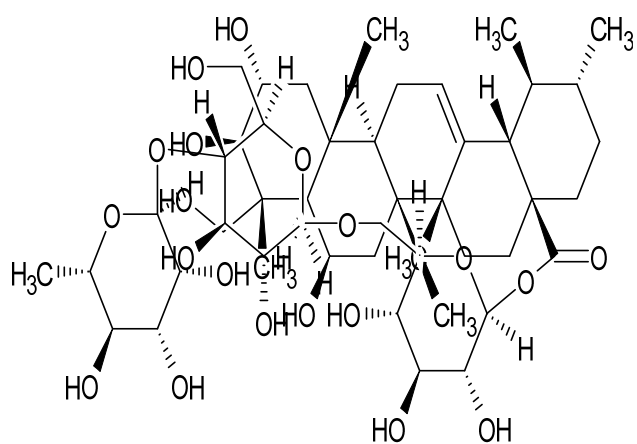
Asperpyrone A (15)



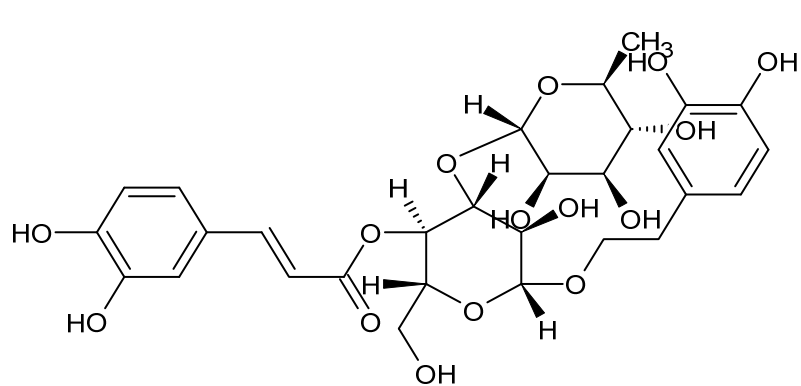
Asiaticoside (16)



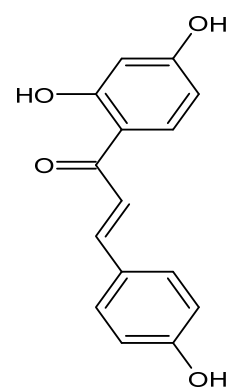
Arctiin (17)



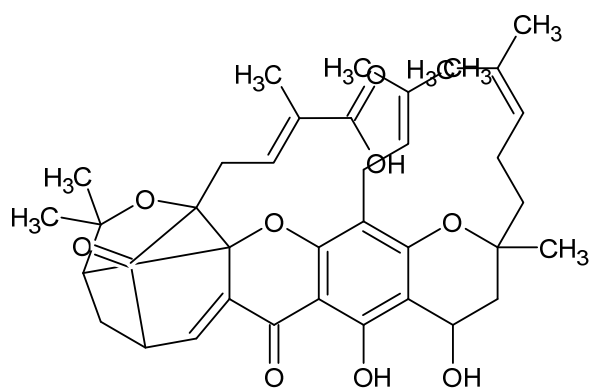
Madecassoside (18)



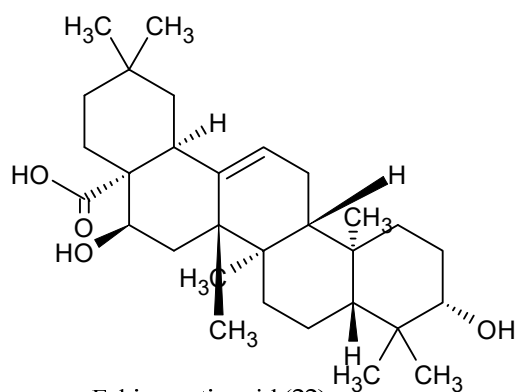
Acteoside (19)



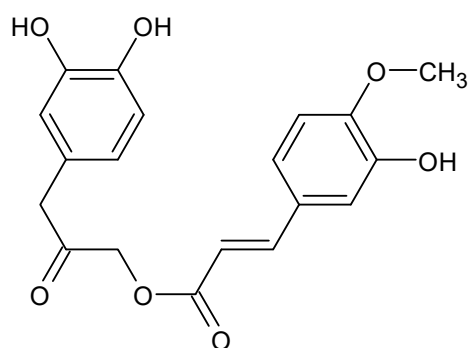
Isoliquiritigenin (20)



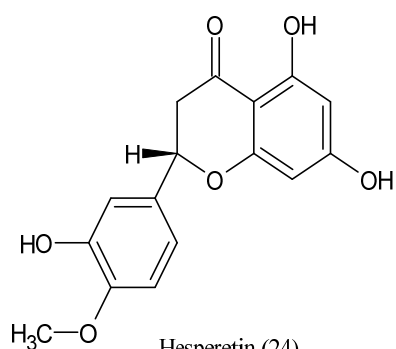
Neogambogic acid (21)



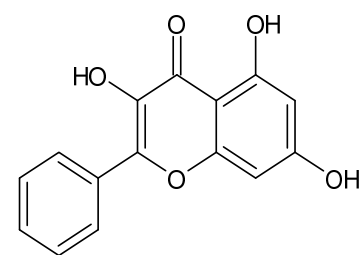
Echinocystic acid (22)



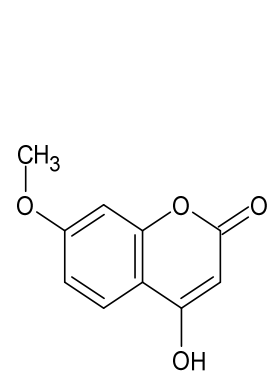
Cimracemate A (23)



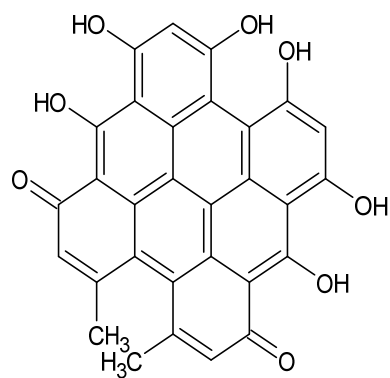
Hesperetin (24)



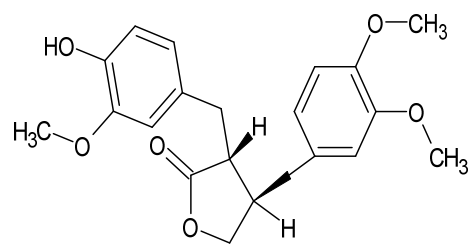
Galangin (25)



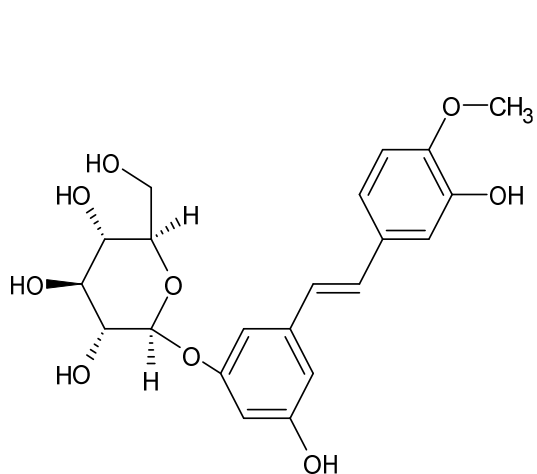
4-hydroxy-7-methoxycoumarin (26)



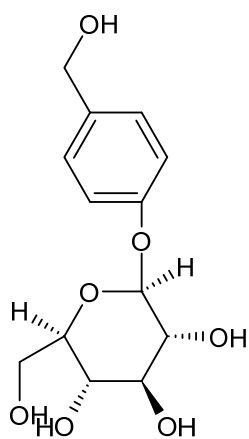
Hypericin (27)



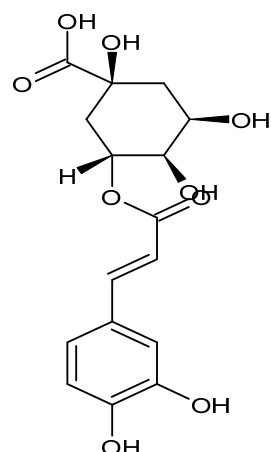
Arctigenin (28)



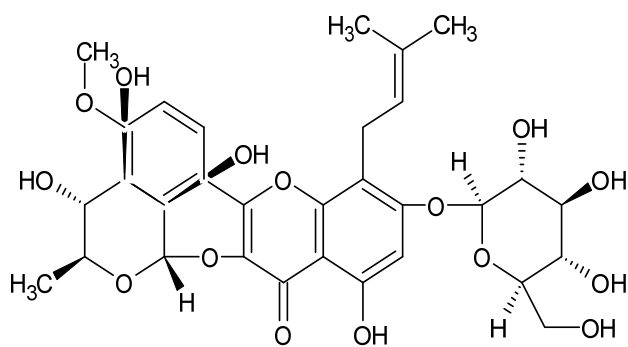
Rhaponticin (29)



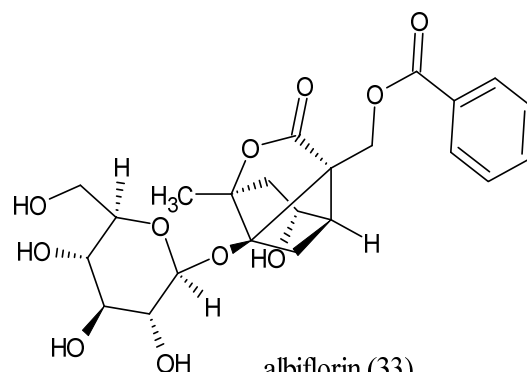
gastrodin (30)



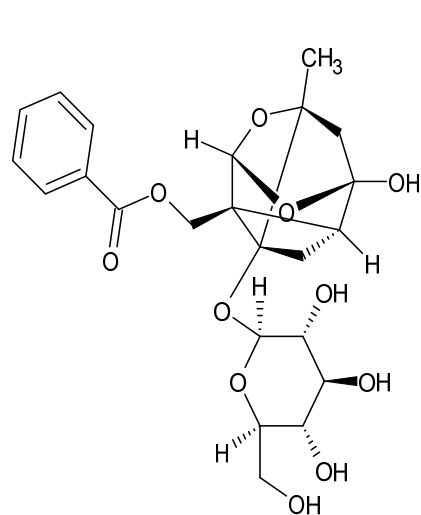
Chlorogenic acid (32)



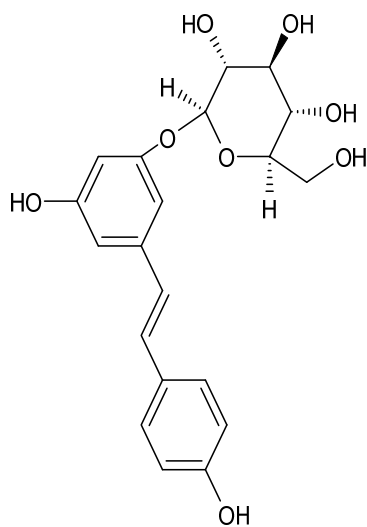
icariin (31)



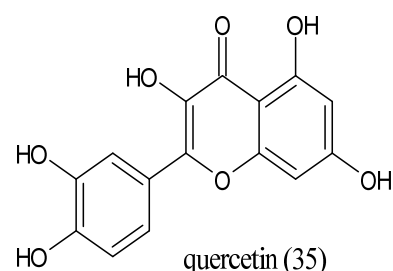
albiflorin (33)



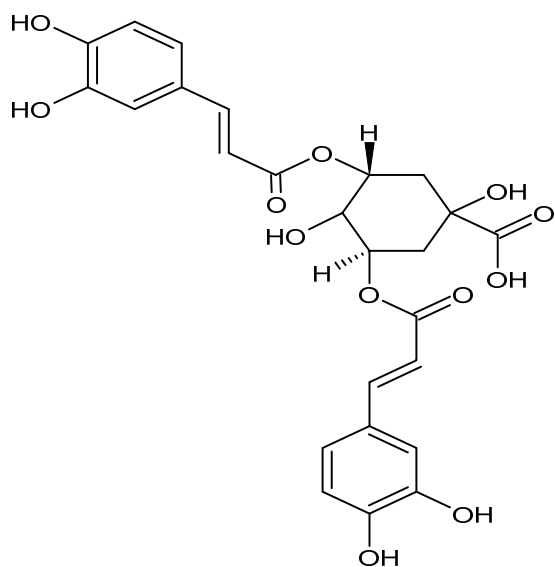
paeoniflorin (34)



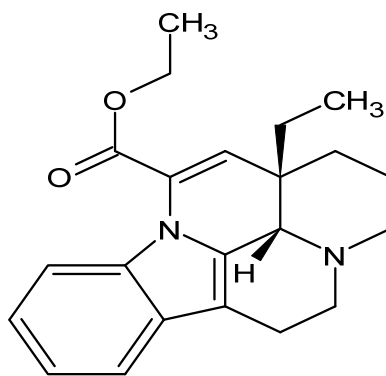
polydatin (36)



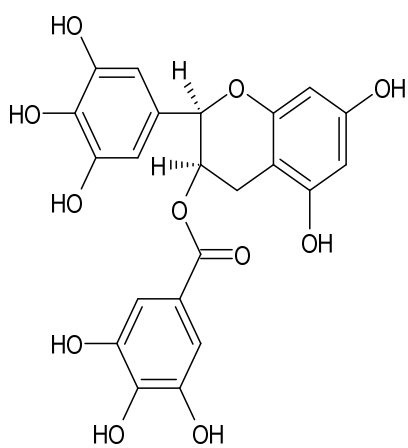
quercetin (35)



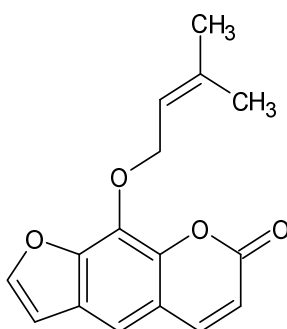
3,5-dicaffeoyl-epi-quinic acid (37)



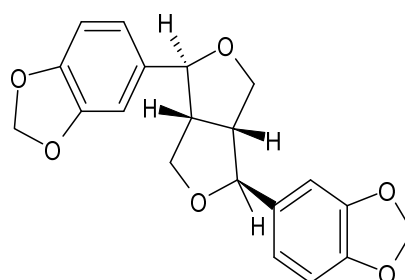
Vinpocetin (38)



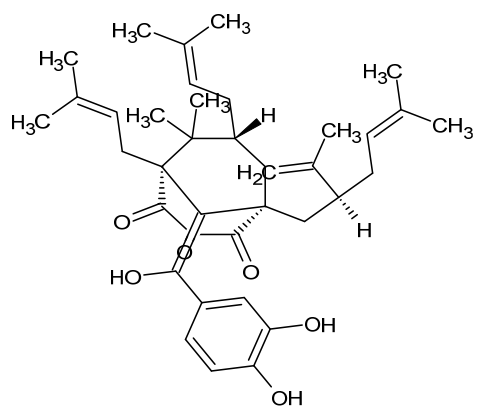
Epigallocatechin gallate (EGCG) (39)



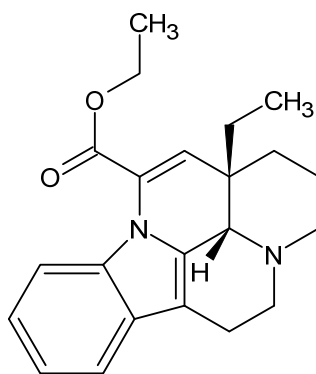
imperatorin (40)



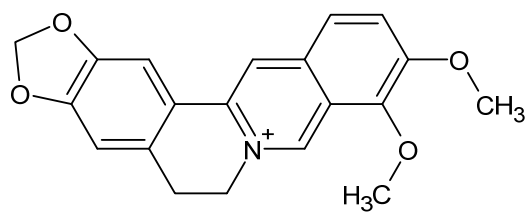
sesamin (41)



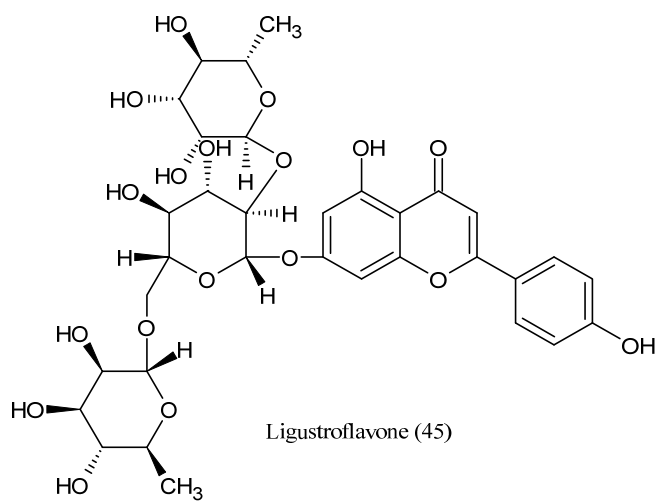
garcinol (42)



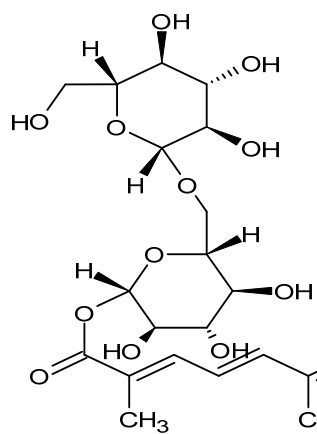
Macrolactins F (43)



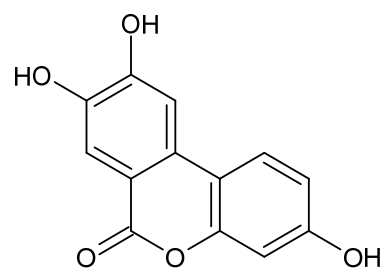
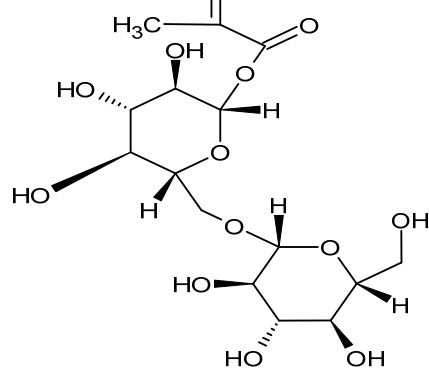
Berberine (44)



Ligustroflavone (45)



Crocin (46)



Urolithin C (47)

BV/TV (bone volume/total volume)

BVD (bone volume density)

CaMKII (Ca²⁺/calmodulin (CaM)-dependent protein kinases)

CaSR (Calcium sensing receptors)

CAT (catalase)

Cbfa1(Core-binding factor alpha 1)

c-Fms (Colony-stimulating factor-1 receptor)

c-Src (proto-oncogene tyrosine-protein kinase)

CTR (calcitonin receptor)

CTSK (cathepsin K)

CTx (carbo-terminal telopeptide of type I collagen)

cyt c (cytochrome C)

DEX (dexamethasone)

DMP-1 (dentin matrix acidic phosphoprotein 1)

EGCG (Epigallocatechin gallate)

ERK (extracellular signal-regulated kinase)

FasL (Fas ligand)

FOXP3+ (forkhead box P3+)

GCS (γ -glutamylcysteine synthetase)

GSK3 β (glycogen synthase kinase-3 β)

GSR (glutathione S- reductase)

hAOBs (human alveolar osteoblasts)

HDL (high-density lipoproteins)

HIF-1 (hypoxia-inducible factor 1)

HMGB1 (High mobility group box 1)

hPDLs (human periodontal ligament cells)

i.p (intraperitoneal injection)

IFN- γ (interferon gamma)

IGF (insulin-like growth factor)

IL-1 (interleukin 1)

IL-17 (interleukin 17)

IL-1 β /6 (interleukin 1 beta)

IL-6 (interleukin 6)

I κ B α (kappa light polypeptide gene enhancer in B-cells inhibitor)

JNK (c-Jun N-terminal kinase)

Keap-1 (Kelch-like ECH-associated protein 1)

LDL (low-density lipoproteins)

MAPKs (mitogen-activated protein kinase)

MCPs (MC3T3-E1 preosteoblasts)

M-CSF (monocyte/macrophage colony stimulating factor)

MMCs (mouse macrophage cells)

MMP-9 (matrix metalloproteinase-9)

N.Oc (OC number per bone surface)

NFATc1 (nuclear factor of activated T Cells 1)

NF- κ B (nuclear factor kappa B)

NOX-1/2 (NADPH oxidase 1/2)

NP (number of porosity)

NPs (Natural products)

NQO1 (NAD(P)H:quinone reductase)

NR1D (nuclear receptor subfamily 1, group D, members)

NR1D1 (nuclear receptor subfamily-1 group D member-1)

Nrf2 (nuclear factor erythroid 2-related factor 2)

OA (osteoarthritis)

Oc.S/BS (osteoclast surface per bone surface)

OCG (osteoclastogenesis)

OCN (osteocalcin)

OP (osteoporosis)

OPG (osteoprotegerin)

OSCAR (osteoclast-associated receptor)

OVX (ovariectomized)

p.o (per oral injection)

P1NP (N-terminal propeptide of type I collagen)

p38 MAPK (mitogen-activated protein kinase)

PGC-1 α (peroxisome proliferator-activated receptor gamma coactivator 1-alpha)

PGE2 (prostaglandin E2)

PI3K (phosphoinositide 3-kinase)

PP (percentage porosity)

PTH (parathyroid hormone)

PUVA (Psoralen plus ultra violet radiation)

RA (Rheumatoid arthritis)

RANKL (receptor activation of NF- κ B ligand)

ROS (reactive oxygen species)

SASP (senescence-associated secretory phenotype)

Sc (subcutaneous injection)

SERMs (selective estrogen receptor modulators)

SIM (structure model index)

sirt-1 (sirtuin-1)

SMAD (SMA (small worm phenotype); MAD (mothers against decapentaplegic))

SOST (sclerostin)

TAG (triacylglycerol)

TC (total cholesterol)

Th17 (T helper 17)

TN (trabecular number)

TNF- α (tumor necrosis factor-alpha)

TRAC (T Cell Receptor Alpha Constant)

TRAF6 (tumor necrosis factor (TNF) receptor-associated factor-6)

TRAF6TNF (receptor-associated factor-6)

TRAP (tartrate-resistant acid phosphatase)

TS (trabecular separation/space)

TT (trabecular thickness)

UVA (ultra violet radiation)

VDR (vitamin D receptor)

VEGF-A (Vascular endothelial growth factor alpha)

γ -EV (γ -Glutamyl valine)