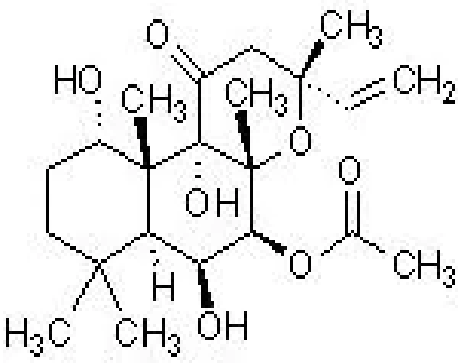
Forskolin (CAS: 66575-29-9)

Catalog #: EBC51097

Biological Activity

Synonym(s)	Coleonol, Adenylyl cyclase activator
Chemical Name	(3R,4aR,5S,6S,6aS,10S,10aR,10bS)-Dodecahydro-6,10,10b-trihydroxy-3,4a,7,7,10a-pentamethyl-1-oxo-3-vinyl-1H-benzo[f]chromen-5-yl acetate
Application	Forskolin is an adenylate cyclase activator and MAP kinase inhibitor
CAS Number	66575-29-9
Purity	≥98.0%
Molecular Weight	410.50
Molecular Formula	$C_{22}H_{34}O_7$
SMILES	CC(=O)O[C@H]2[C@@H](O)[C@@H]1[C@](C)([C@@H](O)CCC1(C)C)[C@@]3(O)C(=O)C[C@](C)(C=C)O[C@]23C
Target & IC50	MAP kinase: IC50 = 25 Mm; adenylyl cyclase: IC50 = 41 nM
Shipping	Gel Pack
Storage	Store at -20° C

Molecular Structure



Solubility

DMSO: 30 mg/mL (73 mM)
Ethanol: 15 mg/mL (36.5 mM)
PS: < 1 mg/ml refers to the product insoluble

Product Descriotion

Forskolin is a diterpenoid isolated from Coleus forskohlii, interacts directly with the catalytic subunit of A cyclase (adenylate cyclase), activating the enzyme and raising intracellular levels of cAMP. Forskolin is cell permeable and active in vivo producing positive inotropic, platelet anti-aggregatory and anti-hypertensive effects in vitro. Has also been shown to exhibit smooth muscle relaxant activity, decrease in intraocular pressure and the promotion of hormonal release from the pituitary glands in vitro. Inhibits MAP kinase, induces phosphorylation of CREB, connexin 43, Bad, ATF-1 and PKB. Forskolin is an inhibitor of AChR.