

Forskolin, Coleus forskohlii - CAS 66575-29-9 - Calbiochem

Art. ID	SAF-344270-10MG
Unit	1 x 10 mg
Deliverydetails	No Dangerous Good /not restricted

Description

The major cell-permeable diterpene isolated from the Indian plant Coleus forskohlii. At low doses, it acts as a positive inotropic agent. At higher doses, it serves as a hypotensive and vasodilatory agent due to its actions as a smooth muscle relaxant. No major side effects are observed at effective doses. Forskolins pharmacological activities are due to its activation of adenylate cyclase ($EC_{50} = 4 \times 10^{-6} M$), resulting in increased cAMP levels. The exact mechanism of forskolins positive inotropic effect is unknown but may be related to a cAMP-dependent increase in Na^+ permeability that results in indirect augmentation of Ca^{2+} release. Inhibits MAP kinase in rat renal mesangial cells ($IC_{50} = 25 \times 10^{-6} M$). Also acts as a Hh pathway antagonist. Shown to inhibit apoptosis in cerebellar granule cells and to induce apoptosis in resting human B lymphocytes. A cardioactive diterpene isolated from the Indian plant Coleus forskohlii. At low doses, acts as a positive inotropic agent in dogs, cats, spontaneously hypertensive and normal rats, and isolated guinea pig heart. At higher doses, acts as a hypotensive and vasodilatory agent due to its action as a smooth muscle relaxant. No major side effects are observed at effective doses. Rapid and reversible activator of adenylate cyclase ($EC_{50} = 4 \times 10^{-6} M$) in membranes and intact cells. Does not affect the activity of guanylate cyclase or cyclic nucleotide phosphodiesterases. The exact mechanism of forskolin's positive inotropic effect is unknown but may be related to a cAMP-dependent increase in Na^+ permeability, which results in indirect augmentation of Ca^{2+} release. Inhibits MAP kinase in rat renal mesangial cells ($IC_{50} = 25 \times 10^{-6} M$). Also acts as a Hh pathway antagonist. Shown to inhibit apoptosis in cerebellar granule cells and to induce apoptosis in resting human B-lymphocytes.

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
	Forskolin 7Beta-acetoxy	[66575-29-9]				
	-8,13-epoxy-1alpha,6Bet					
	a,9alpha-trihydroxy-lab					
	d-14-en-11-one					