

Forskolin

Catalog #: 27067

Lot #: 130830

Size: 10 mg

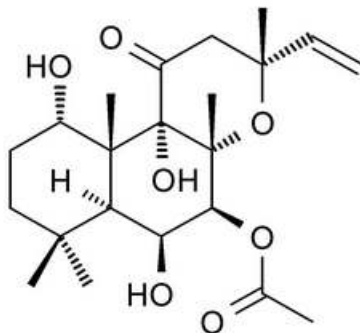
Structure:

CAS Registry #: 66575-29-9

Purity: ≥ 99%

Chemical Formula: C₂₂H₃₄O₇

Molecular Weight: 410.5



Description: Forskolin is a cell permeable adenylate cyclase activator which causes an increase in the intracellular concentration of cAMP. This makes it an important hypotensive and vasodilatory agent. Forskolin also affects calcium currents and inhibits PKC (Protein Kinase C)-stimulated MAPK and RAF-1.

Appearance: White to off-white granular powder.

Solubility: Soluble in DMSO at 160 mg/ml; very poorly soluble in water; maximum solubility in plain water is estimated to be about 25-50 μM. Buffers, serum, or other additives may increase or decrease the aqueous solubility. Forskolin is also soluble in ethanol (50 mg/ml), but this solvent is not recommended, as it inhibits forskolin activation of adenylate cyclase.

Biological Activity: Forskolin is shown to activate adenylate cyclase at EC₅₀ of 5-10 μM.

Storage/Stability: Store at or below -20°C. Stable for at least 1 year when stored as directed. Anhydrous DMSO stock solutions are stable for at least 3 months. Avoid freeze/thaw cycles.

Quality Control: The purity was determined by HPLC.

References:

1. Awad, *et al.*, *J.Biol.Chem* **258**: 2690 (1983).
2. KB Seamon., *et al.*, *PNAS* **78 (6)**:3363 – 3367 (1981).
3. Siddhanti, S.R., *et al.*, *Endocrinology* **136**: 4834 – 4841 (1995).