FORSKOLIN
Product Number F6886
Storage Temperature RT

CAS #: 66575-29-9
Synonyms: Colforsin; 7-beta-acetoxy-8,13-epoxy-1-
a, 6-beta, 9-alpha-trihydroxylabd-14-en-11-one; Coleonol

Product Description

Appearance: White to white with yellow cast powder
Melting Point: 230-232°C
Molecular formula: C_{22}H_{34}O_{7}
Molecular weight: 410.5 (anhydrous)
Specific Rotation: -26.19° where c = 1.68% in chloroform at 25°C
Absorbance max: 210 nm (E molar = 1000)
305 nm (E molar = 50)
Purity: Not less than 98% (HPLC)

Forskolin is a labdane diterpenoid with antihypertensive, positive inotropic, platelet aggregation inhibitory and adenylate cyclase activating properties. The activation of adenylate cyclase results in increased intracellular cyclic AMP in most tissue and cells.

Sigma’s product is prepared by grinding Coleus forskohlii roots followed by extraction and then purification by silica chromatography.

Preparation Instructions
Forskolin is soluble in organic solvents such as ethanol, chloroform and DMSO. Sigma routinely tests its solubility in chloroform at 50 mg/mL and observes a clear, colorless to pale yellow solution. Forskolin is soluble in water (with 2% ethanol) up to 0.2 mM by first dissolving in ethanol at 5 mg/mL and doing subsequent dilutions with water. Similar results were found with DMSO. Please note, however, that various solvents, including ethanol, inhibited the forskolin activation of adenylate cyclase. DMSO is recommended for preparing forskolin solutions because at concentrations of 5% or less of DMSO, there is little if any inhibition of forskolin activation.

Forskolin solutions at 5 mg/mL in either ethanol or DMSO were stable for at least 6 months at room temperature per HPLC analysis.

Storage/Stability
When stored as indicated Forskolin has a shelf-life of five years.

References
3. The Merck Index, 12th ed., #2539.
4. Sigma Data.