PRODUCT INFORMATION



1,9-dideoxy Forskolin Item No. 11664

CAS Registry No.: 64657-18-7

Formal Name: (3R,4aS,5S,6S,6aS,10aS,10bR)-5-

> (acetyloxy)-3-ethenyldodecahydro-6hydroxy-3,4a,7,7,10a-pentamethyl-1H-

naphtho[2,1-b]pyran-1-one

MF: $C_{22}H_{34}O_5$ FW: 378.5 **Purity:** ≥98%

Supplied as: A crystalline solid

Stability: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

1,9-dideoxy Forskolin is supplied as a crystalline solid. A stock solution may be made by dissolving the 1,9-dideoxy forskolin in the solvent of choice. 1,9-dideoxy Forskolin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of 1,9-dideoxy forskolin in ethanol is 15 mg/ml and 30 mg/ml in DMSO and DMF.

1,9-dideoxy Forskolin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 1,9-dideoxy forskolin should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. 1,9-dideoxy Forskolin has a solubility of approximately 0.1 mg/ml in a 1:10 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Forskolin (Item No. 11018) is a naturally-occurring diterpene that activates adenylyl cyclase through its catalytic subunit and is commonly used to raise levels of cAMP in a wide variety of intact cells and tissue preparations. 1,9-dideoxy Forskolin is an analog of forskolin that interacts with, but does not activate, adenylyl cyclase.^{2,3}

References

- 1. Insel, P.A. and Ostrom, R.S. Forskolin as a tool for examining adenylyl cyclase expression, regulation, and G protein signaling. Cell Mol. Neurobiol. 23(3), 305-314 (2003).
- 2. McHugh, E.M. and McGee, R., Jr. Direct anesthetic-like effects of forskolin on the nicotinic acetylcholine receptors of PC12 cells. J. Biol. Chem. 261(7), 3103-3106 (1986).
- 3. Pinto, C., Hübner, M., Gille, A., et al. Differential interactions of the catalytic subunits of adenylyl cyclase with forskolin analogs. Biochem. Pharmacol. 78(1), 62-69 (2009).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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