



Data Sheet

Research Use Only

Compound Name

Forskolin

Catalog Number

SM18

Alternative Names

Colforsin, Coleonol, [3R-(3 α ,4 α β ,5 β ,6 β ,6 $\alpha\alpha$,10 α ,10 $\alpha\beta$,10 $\beta\alpha$)]-5-(Acetyloxy)-3-ethenyldodecahydro-6,10,10b-trihydroxy-3,4a,7,7,10a-pentamethyl-1H-naphtho[2,1-b]pyran-1-one

Activity

Forskolin is a cAMP pathway activator, by activating adenylyl cyclase.

Effect

Forskolin allows maintenance of human embryonic stem cells in a naive or ground state similar to mouse embryonic stem cells. Forskolin also enables chemical reprogramming of mouse embryonic fibroblasts to induced pluripotent stem cells, when combined with other small molecules. Forskolin is a vasodilator, which can help in controlling the cause of glaucoma and reduce urinary tract infections.

Purity

>99%

CAS

66575-29-9

Formula

C₂₂H₃₄O₇

Molecular Weight

410.50

Solubility

DMSO, ethanol

Stability

Stable at -20°C. Keep away from direct sunlight.

References

1. Seamon, KB., et al. 1986. Adv Cyclic Nucleotide Protein Phosphorylation Res. 20: 1-150. PMID: 3028083
2. Laurenza, A., et al. 1989. Trends pharmacol. Sci. 10: 442-447. PMID: 2692256
3. De Souza, N.J., et al. 1983. Med. Res. Rev. 3: 201-219. PMID: 6345959
4. Hanna, J., et al. 2010. Proc Natl Acad Sci USA. 107(20): 9222-9227. PMID: 20442331
5. Hou, P., et al. 2013. Science. 341(6146): 651-654. PMID: 23868920