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DATASHEET

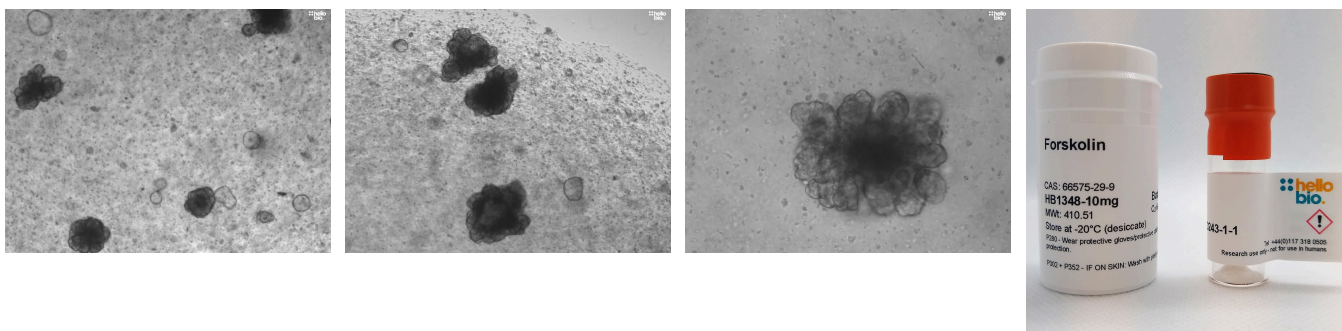
Forskolin

Product overview

Name	Forskolin
Cat No	HB1348
Biological action	Activator
Purity	>98%
Customer comments	<p><i>I am currently working with forskolin. The quality of product and service is very satisfying. I am very happy to have access to your high quality products. Pojeong Park, PhD student, University of Bristol, UK</i></p> <p><i>Very satisfied with this product, it works as expected in our liver tumouroid cultures. Hello Bio are a fantastic company that keep you informed of your order throughout the delivery process. Also a fan of the datasheets they provide. Verified customer, UK</i></p>

Description	Cell permeable, reversible adenylyl cyclase activator. Neuronal differentiation inducer. Used in production of liver organoids.
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Images



Biological Data

Biological description	<p>Cell permeable, reversible adenylyl cyclase activator which increases cAMP levels and inhibits platelet-activating factor (PAF).</p> <p>Inhibits mast cell degranulation and lowers intraocular pressure. Also displays vasodilating and hypotensive properties.</p> <p>It is used as a neuronal differentiation inducer, used as a 3D Growth matrix component and used in the production of liver organoids. Forskolin, in combination with the 2i inhibitors (CHIR 99021 & PD 0325901), and LIF is sufficient to transform hESCs to a naive, mouse embryonic-like state.</p>
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Application notes	Figures 1 - 3 show liver hepatocellular carcinoma tumouroids cultured with forskolin and A 83-01
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Solubility & Handling

Storage instructions

-20 °C (desiccate)

Solubility overview

Soluble in DMSO (25 mM)

Handling

Cell culture media can be prewarmed before adding the compound to avoid potential precipitation of the compound.

Important

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

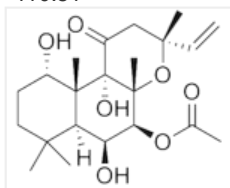
Chemical name

[3*R*-(3α,4aβ,5β,6β,6α,10α,10aβ,10ba)]-5-(Acetyloxy)-3-ethenyldodecahydro-6,10,10b-trihydroxy-3,4a,7,7,10a-pentamethyl-1*H*-naphtho[2,1-*b*]pyran-1-one

Molecular Weight

410.51

Chemical structure



Molecular Formula

C₂₂H₃₄O₇

CAS Number

66575-29-9

PubChem identifier

47936

SMILES

CC(=O)O[C@H]1[C@H]([C@@H]2[C@]([C@H](CCC2(C)C)O)([C@@]3[C@@]1(O[C@@](CC3=O)(C)C=C)C)O)C)O

InChi

InChI=1S/C22H34O7/c1-8-19(5)11-14(25)22(27)20(6)13(24)9-10-18(3,4)16(20)15(26)17(28-12(2)23)21(22,7)29-19/h8,13,15-17,24,26-27H,1,9-11H2,2-7H3/t13-,15-,16-,17-,19-,20-,21+,22-/m0/s1

InChIKey

OHCQJHSOBUTRHG-KGGHGJDLSA-N

MDL number

MFCD00082317

References

Forskolin as a tool for examining adenylyl cyclase expression, regulation, and G protein signaling.

Insel PA *et al* (2003) Cell Mol Neurobiol 23(3)

PubMedID

12825829

Forskolin and derivatives as tools for studying the role of cAMP.

Alasbahi RH *et al* (2012) Pharmazie 67(1)

PubMedID

22393824

Forskolin: upcoming antiglaucoma molecule.

Wagh VD *et al* (2012) J Postgrad Med 58(3)

PubMedID

23023353

Interactions of forskolin and adenylate cyclase. Effects on substrate kinetics and protection against inactivation by heat and N-ethylmaleimide.

Awad JA *et al* (1983) J Biol Chem 258(5)

PubMedID

6681815