

NKH 477

Size: 10 mg
M.W.=546.1
Batch No.: 1A/2004002



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This product is for laboratory research ONLY and not for diagnostic use

Description:

Water-soluble analogue of forskolin that is a potent activator of adenylyl cyclase; shows some selectivity for cardiac (type V) adenylyl cyclase. Stimulates bronchodilation ($EC_{50} = 32.6$ nM) and is an orally active potent positive chronotrope and hypotensive agent in vivo.

PHYSICAL AND CHEMICAL PROPERTIES

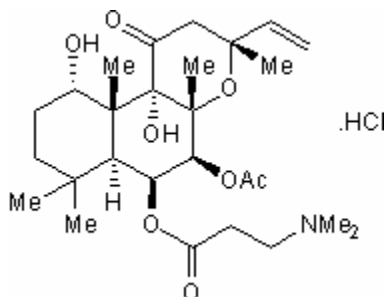
Batch Molecular Formula: $C_{27}H_{43}NO_8 \cdot HCl$

Batch Molecular Weight: 546.1

CAS Number: [138605-00-2]

Physical Appearance: White solid

Batch Molecular Structure:



Solubility: Water to 40 mM
 Ethanol to 15 mM
 DMSO to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60° C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide.

Our Standard Recommendations Are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20° C or below and used within 1 month. Wherever possible solutions should be made up and stored on the same day.

References:

1. **Hosono *et al*** (1992) Cardiovascular and adenylyl cyclase stimulant properties of NKH477, a novel water-soluble forskolin derivative. *J.Cardiovasc.Pharmacol.* **19**:625.
2. **Satake *et al*** (1998) Relaxant effects of NKH477, a new water-soluble forskolin derivative, on guinea-pig tracheal smooth muscle: the role of Ca^{2+} -activated K^{+} channels. *Br.J.Pharmacol.* **123**:753
3. **Toya *et al*** (1998) Forskolin derivatives with increased selectivity for cardiac adenylyl cyclase. *J.Mol.Cell.Cardiol.* **30**:97

Storage: Desiccate at +4° C. Product shipped at ambient temperature.