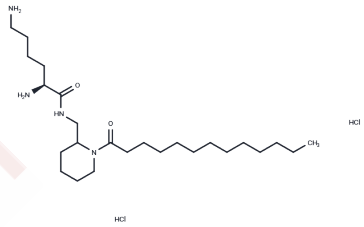
Data Sheet (Cat.No.T37480)

TargetMol

NPC-15437 dihydrochloride

Chemical Properties



CAS No. : 141774-20-1

Formula: C25H52Cl2N4O2

Molecular Weight: 511.62

Storage: Keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	NPC-15437 dihydrochloride is a synthetic prototype belonging to a novel structural class of protein kinase C (PKC) inhibitors. NPC 15437 potently inhibits PKC enzymatic activity and phorbol ester binding with IC50 values around 19 μM and 23 μM, respectively, without affecting cAMP-dependent or Ca2+/calmodulin-dependent kinases at concentrations up to 300 μM, thereby demonstrating selectivity for PKC and serving as an important tool compound for dissecting PKC-mediated cellular signaling mechanisms.
Targets(IC50)	PKC

Solubility Information

Solubility	PBS (pH 7.2): 0.5 mg/mL (slightly soluble),Sonication is recommended. Ethanol: 2.5 mg/mL (4.89 mM),Sonication is recommended. DMF: 5 mg/mL (9.77 mM),Sonication is recommended. DMSO: 5.13 mg/mL (10.03 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9546 mL	9.7729 mL	19.5458 mL
5 mM	0.3909 mL	1.9546 mL	3.9092 mL
10 mM	0.1955 mL	0.9773 mL	1.9546 mL
50 mM	0.0391 mL	0.1955 mL	0.3909 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Mathis C, et al. The selective protein kinase C inhibitor, NPC 15437, induces specific deficits in memory retention in mice. Eur J Pharmacol. 1992 Sep 10;220(1):107-10.

Sullivan JP, et al. 2,6-Diamino-N-([1-(1-oxotridecyl)-2-piperidinyl] methyl)hexanamide (NPC 15437): a novel inhibitor of protein kinase C interacting at the regulatory domain. Mol Maheux, J., et al. Pharmacol. 1992 Jan;41(1): 38-44.

Modulation of Nur77 expression by dopaminergic drug is altered by a MEK pathway inhibitor in vivo. The FASEB Journal, 20: A684-A685.

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