

Nat-20(S)-yne

Chemical Properties

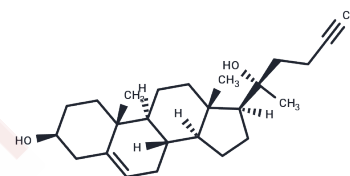
CAS No. : 1397692-46-4

Formula: C₂₅H₃₈O₂

Molecular Weight: 370.57

Storage: 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	Smoothed (SMO) is a GPCR-like receptor which, with Patched, mediates hedgehog signaling to regulate gene expression through the Gli transcription factors. 20(S)-hydroxy Cholesterol (20(S)-OHC) is an oxysterol which binds SMO and activates hedgehog signaling (EC ₅₀ = 3 μM), and this activation is selective for the nat-20(S)-OHC enantiomer. Nat-20(S)-OHC synergizes with the SMO agonist SAG, suggesting an allosteric effect. Nat-20(S)-yne is a form of nat-20(S)-OHC with a terminal alkyne group, which can be used in linking reactions known as click chemistry. Click chemistry involves highly dependable and specific azide-alkyne bioconjugation reactions and can be used to capture or immobilize bioactive molecules. Thus, nat-20(S)-yne has been conjugated with magnetic beads to demonstrate that nat-20(S)-OHC directly binds SMO.
Targets(IC ₅₀)	Others

Solubility Information

Solubility	Ethanol: 10 mg/mL (26.99 mM), Sonication is recommended. DMSO: 0.5 mg/mL (1.35 mM), Sonication is recommended. DMF: 14 mg/mL (37.78 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6985 mL	13.4927 mL	26.9855 mL
5 mM	0.5397 mL	2.6985 mL	5.3971 mL
10 mM	0.2699 mL	1.3493 mL	2.6985 mL
50 mM	0.054 mL	0.2699 mL	0.5397 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481