

NIBR-LTSi

Chemical Properties

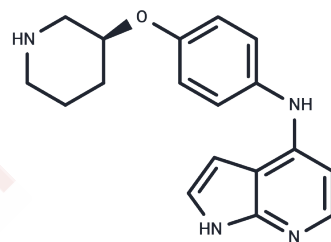
CAS No. :

Formula: C₁₈H₂₀N₄O

Molecular Weight: 308.38

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	NIBR-LTSi is a selective LATS kinase inhibitor that also activates YAP signaling, promotes tissue stem cell expansion and tissue regeneration both in vitro and in vivo, accelerates liver regeneration in a mouse partial hepatectomy model, and is capable of expanding organoids derived from several mouse and human tissues.
Targets(IC50)	YAP
In vitro	Methods: A human 3D skin model was treated with NIBR-LTSi (1, 3, 10 μM, 3 days) to evaluate its proliferative effects. Results: NIBR-LTSi treatment resulted in a dose-dependent increase in keratinocyte proliferation. In addition, NIBR-LTSi-induced YAP signaling impeded the differentiation of human keratinocytes. [1]
In vivo	Methods: Mice were treated with NIBR-LTSi (30, 100 mg/kg, oral administration) to study the later stages of liver regeneration. Results: NIBR-LTSi resulted in significant dose-dependent growth of organoids starting 48 hours after initial treatment and showed reduced expression of the mature podocyte marker WT1 and increased serum blood urea nitrogen (BUN) levels. [1]

Solubility Information

Solubility	DMSO: 1 mg/mL (3.24 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	3.2428 mL	16.2138 mL	32.4275 mL
5 mM	0.6486 mL	3.2428 mL	6.4855 mL
10 mM	0.3243 mL	1.6214 mL	3.2428 mL
50 mM	0.0649 mL	0.3243 mL	0.6486 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

Namoto K, et al. NIBR-LTSi is a selective LATS kinase inhibitor activating YAP signaling and expanding tissue stem cells in vitro and in vivo. *Cell Stem Cell*. 2024 Apr 4;31(4):554-569.e17.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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