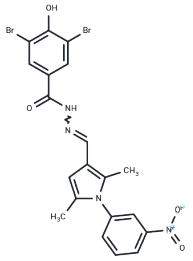
Data Sheet (Cat.No.T15663)

TargetMol

Kinesore

Chemical Properties



CAS No. : 363571-83-9

Formula: C20H16Br2N4O4

Molecular Weight: 536.17

Storage: Store at low temperature
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	Kinesore is a cell-permeable small molecule modulator that binds primarily to the microtubule motor protein kinesin-1, thereby inhibiting the interaction between KLC2 (kinesin light chain 2) and SKIP (SKIP protein), and thus regulating the structure of the microtubule network to influence cytoskeletal organization and dynamics.
Targets(IC50)	Others,Microtubule Associated,Kinesin
In vitro	In cells treated with Kinesore, the microtubule network was completely reorganized into a series of rings and bundles. Lysosomal compartments were concentrated in the juxtanuclear region, where microtubules were relatively scarce. Kinesore (50 μM) was highly permeable to cells, with 95 ± 2.4% of cells showing a reorganized non-radial microtubule network. [1]

Solubility Information

Solubility	DMSO: 100 mg/mL (186.51 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8651 mL	9.3254 mL	18.6508 mL
5 mM	0.373 mL	1.8651 mL	3.7302 mL
10 mM	0.1865 mL	0.9325 mL	1.8651 mL
50 mM	0.0373 mL	0.1865 mL	0.373 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

Randall TS, et al. A small-molecule activator of kinesin-1 drives remodeling of the microtubule network. Proc Natl Acad Sci U S A. 2017 Dec 26;114(52):13738-13743.
Ibanga J, et al. Mast cell granule motility and exocytosis is driven by dynamic microtubule formation and kinesin-1 motor function. PLoS One. 2022 Mar 22;17(3):e0265122.
Wang S,et al. Microtubule-dependent apical polarization of basement membrane matrix mRNAs in mouse epithelial cells. Cells Dev. 2024 Mar;177:203898.

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