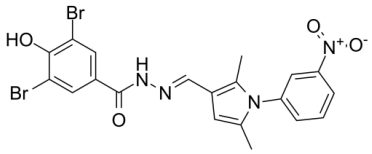
Data Sheet

Product Name:	Kinesore
Cat. No.:	CS-0063850
CAS No.:	363571-83-9
Molecular Formula:	C20H16Br2N4O4
Molecular Weight:	536.17
Target:	Others
Pathway:	Others
Solubility:	DMSO : 125 mg/mL (233.14 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

Kinesore is an inhibitor of the **KLC2-SKIP** Interaction. IC50 & Target: KLC2-SKIP[1]. **In Vitro:** Remarkably, in kinesore-treated cells, the microtubule network is entirely reorganized into a series of loops and bundles. In addition, the lysosomal compartment accumulates in a juxtanuclear position, where there are relatively few microtubules. At 50 μM kinesore, this phenotype is highly penetrant, with 95±2.4% (n=3, total of 200 cells) of cells exhibiting a reorganized nonradial microtubule network. In titration experiments, in cells treated for 1 h, this phenotype becomes apparent at a concentration of 25 μM kinesore, with relatively little effect at or below concentrations of 12.5 μM. The effect is reversible because a 2-h washout of kinesore from cells treated for 1 h led to the reestablishment of the radial microtubule array. This kinesore-induced reorganization of the microtubule network is observed in a panel of mammalian normal and cancer cell lines. In wild-type cells, 50 μM kinesore induces the remodeling of the microtubule network and the formation of extensive microtubule-rich projections. This phenotype is strongly suppressed in Kif5B knockout cells, confirming that microtubule remodeling induced by kinesore is dependent upon the presence of kinesin-1[1].

PROTOCOL (Extracted from published papers and Only for reference)

Cell Assay: [1]To examine the effect of kinesore in cells, **HeLa cells** are treated with **50 μM** kinesore or vehicle control (0.1% DMSO) for 1 h[1].

References:

[1]. 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.

CAIndexNames:

Benzoic acid, 3,5-dibromo-4-hydroxy-, 2-[[2,5-dimethyl-1-(3-nitrophenyl)-1H-pyrrol-3-yl]methylene]hydrazide

SMILES:

O=C(N/N=C/C1=C(C)N(C2=CC=CC([N+]([O-])=O)=C2)C(C)=C1)C3=CC(Br)=C(O)C(Br)=C3

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA