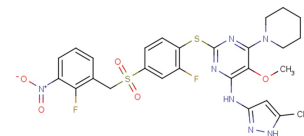


Centrinone-B

Chemical Properties

CAS No.:	1798871-31-4
Formula:	C ₂₇ H ₂₇ F ₂ N ₇ O ₅ S ₂
Molecular Weight:	631.67
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).



Biological Description

Description	Centrinone-B (LCR-323) is a potent and highly selective inhibitor of PLK4 (K _i : 0.59 nM).
Targets(IC ₅₀)	PLK4: 0.59 nM (ki) PLK4 G95L: 497.53 nM (ki) Aurora A: 1239 nM (ki) Aurora B: 5597.14 nM (ki)
In vitro	Centrinone-B (0-200 nM) significantly decreases cell viability of PLK4-centriole conjunction melanoma cell lines except for p53 mutant SK-MEL-28, and this effect is via inhibition of PLK4. Centrinone-B slightly binds to Aurora A and Aurora B (K _i s: 1239 nM and 5597.14 nM). Centrinone-B exhibits >1000-fold selectivity for Plk4 over Aurora A/B in vitro and does not affect cellular Aurora A or B substrate phosphorylation at concentrations that deplete centrosomes [1]. Inhibition of PLK4 by Centrinone-B also induces apoptosis in human melanoma cell lines [2].

Solubility Information

Solubility	DMSO: 25 mg/mL (39.58 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.583 mL	7.916 mL	15.831 mL
5 mM	0.317 mL	1.583 mL	3.166 mL
10 mM	0.158 mL	0.792 mL	1.583 mL
50 mM	0.032 mL	0.158 mL	0.317 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

- Wong YL, et al. Cell biology. Reversible centriole depletion with an inhibitor of Polo-like kinase 4. Science. 2015 Jun 5;348(6239):1155-60.
- Denu RA, et al. Centriole Overduplication is the Predominant Mechanism Leading to Centrosome Amplification in Melanoma. Mol Cancer Res. 2018 Jan 12.

Inhibitors · Natural Compounds · Compound Libraries

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

Tel:781-999-4286

E-mail:info@targetmol.com

Address:36 Washington Street,Wellesley Hills,MA 02481