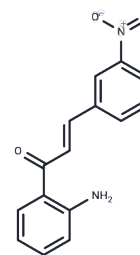


CDC25B-IN-2

Chemical Properties

CAS No. : 134271-74-2
 Formula: C₁₅H₁₂N₂O₃
 Molecular Weight: 268.27
 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	BIA is an inhibitor of the interaction between TMBIM6 and mTORC2, which ultimately blocks AKT activation and cancer progression.
Targets(IC50)	mTOR, Phosphatase
In vitro	The proliferation and cell viability of all cell lines were inhibited by treatment with 5 μ M BIA. The IC ₅₀ values at 3 days were 1.7 \pm 0.1 μ M for HT1080, 2.6 \pm 0.4 μ M for MCF cells, 2.6 \pm 0.5 μ M for MDA-MB-231 cells, and 2.4 \pm 0.4 μ M for SKBR3 cells. Moreover, HT1080 cells stably overexpressing TMBIM6 showed high sensitivity to BIA[1]. BIA decreases the binding between TMBIM6 and mTORC2, we performed a gel filtration assay in TMBIM6-overexpressing HT1080 cells after treatment with BIA during 24h[1].

Solubility Information

Solubility	DMSO: 65 mg/mL (242.29 mM), Sonication is recommended. ($<$ 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (7.46 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.7276 mL	18.6379 mL	37.2759 mL
5 mM	0.7455 mL	3.7276 mL	7.4552 mL
10 mM	0.3728 mL	1.8638 mL	3.7276 mL
50 mM	0.0746 mL	0.3728 mL	0.7455 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

Kim H K , Bhattarai K R , Junjappa R P , et al. TMBIM6/BI-1 contributes to cancer progression through assembly with mTORC2 and AKT activation[J]. Nature Communications, 2020, 11(1).

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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