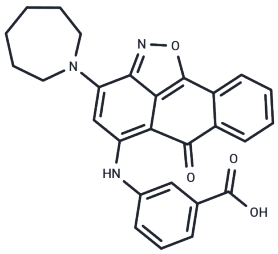
Data Sheet (Cat.No.T11666)

TargetMol

IPR-803

Chemical Properties



CAS No. : 892243-35-5

Formula: C27H23N3O4

Molecular Weight: 453.49

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	IPR-803 is an effective inhibitor of the uPAR·uPA protein-protein interaction (PPI) with anti-tumor activity. IPR-803 binds directly to uPAR with a Ki of 0.2 μM.
Targets(IC50)	Serine Protease,Serine/threonin kinase
In vitro	IPR-803 (0-200 μM; 3 days) blocks the invasion of MDA-MB-231 cells, and most of the inhibition of cell invasion is unlikely due to the cytotoxicity of the compound. IPR-803 (50 μM; 30 minutes) shows inhibition of MAPK phosphorylation. IPR-803 blocks invasion of breast cancer cells line MDA-MB-231, and inhibits matrix metalloproteinase breakdown of the extracellular matrix. IPR-803 impairs MDA-MB-231 cell adhesion and migration. IPR-803 induces a concentration-dependent impairment of cell adhesion with an IC50 of 30 μM. IPR-803 inhibits MDA-MB-231 cells growth with an IC50 of 58 μM[1].
In vivo	In NSG mice with MDA-MB-231 cells xenograft, IPR-803 (200 mg/kg; i.g.; three times a week; for 5 weeks) impairs breast cancer metastasis with a t1/2 of 5 hours. IPR-803 has a low oral bioavailability at 4 percent, and remains high concentration even after 10 hours in tumor tissue[1].

Solubility Information

Solubility	DMSO: 7 mg/mL (15.44 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2051 mL	11.0256 mL	22.0512 mL
5 mM	0.441 mL	2.2051 mL	4.4102 mL
10 mM	0.2205 mL	1.1026 mL	2.2051 mL
50 mM	0.0441 mL	0.2205 mL	0.441 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

Mani T, et al. Small-molecule inhibition of the uPAR•uPA interaction: synthesis, biochemical, cellular, in vivo pharmacokinetics and efficacy studies in breast cancer metastasis. Bioorg Med Chem. 2013 Apr 1;21(7):2145-55.