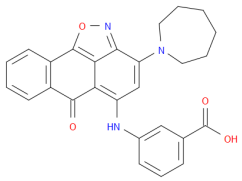
Data Sheet (Cat.No.T11666)

IPR-803

Chemical Properties



CAS No.:	892243-35-5
Formula:	C27H23N3O4
Molecular Weight:	453.49
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	IPR-803 binds directly to uPAR with sub-micromolar affinity. IPR-803 displays anti-tumor activity.IPR-803 is a potent inhibitor of the uPAR•uPA protein-protein interaction (PPI).
Targets(IC_{50})	PPI(ki): ki: 0.2 μM
In vitro	IPR-803 inhibits MDA-MB-231 cells growth with an IC50 of 58 μM. 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 cytotoxicity of the compound. IPR-803 (1-50 μM; 24 hours) does not have a significant effect on apoptosis or necrosis. 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 (MMP) breakdown of the extracellular matrix (ECM). IPR-803 impairs MDA-MB-231 cell adhesion and migration. IPR-803 induces a concentration-dependent impairment of cell adhesion with an IC50 of approximately 30 μM.
In vivo	IPR-803 has a low oral bioavailability at 4 percent, and remains high concentration even after 10 hours in tumor tissue. IPR-803 exhibits a half-life (t1/2) of 5 hours.IPR-803 (200 mg/kg; i.g.; three times a week; for 5 weeks) impairs breast cancer metastasis, but no statistical significance to the differences in body weight between treated and untreated.

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.205 mL	11.026 mL	22.051 mL
5 mM	0.441 mL	2.205 mL	4.41 mL
10 mM	0.221 mL	1.103 mL	2.205 mL
50 mM	0.044 mL	0.221 mL	0.441 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 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. 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.

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