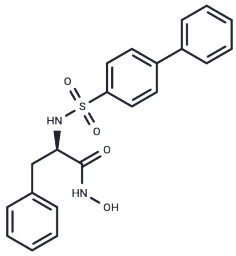
Data Sheet (Cat.No.T36712)

TargetMol

BPHA

Chemical Properties



CAS No. : 193807-60-2

Formula: C21H20N2O4S

Molecular Weight: 396.46

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	BPHA (MMP-2/MMP-9 Inhibitor II) is a potent, selective and orally active inhibitor of MMP-2, MMP-9 and MMP-14 with IC50s of 12 nM, 16 nM and 17 nM, respectively.BPHA does not inhibit MMP-1, -3 and -7 (IC50s of 974, >1000 and 795 nM, respectively).BPHA has anti-angiogenic and BPHA has anti-angiogenic and anti-tumor activities.
Targets(IC50)	MMP
In vivo	Administration of BPHA (200 mg/kg; via oral; daily) in mice effectively suppresses tumor-induced angiogenesis, primary tumor growth, and liver metastasis. BPHA exhibits remarkable growth inhibitory activity of 48% and 45% in the B16-BL6 melanoma and F2 hemangio-endothelioma models, respectively.[1]

Solubility Information

Solubility	Methanol: 22.5 mg/mL (56.75 mM),Sonication is recommended. DMSO: 90 mg/mL (227.01 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5223 mL	12.6116 mL	25.2232 mL
5 mM	0.5045 mL	2.5223 mL	5.0446 mL
10 mM	0.2522 mL	1.2612 mL	2.5223 mL
50 mM	0.0504 mL	0.2522 mL	0.5045 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

Maekawa R, et al. Correlation of antiangiogenic and antitumor efficacy of N-biphenyl sulfonyl-phenylalanine hydroxiamic acid (BPHA), an orally-active, selective matrix metalloproteinase inhibitor. Cancer Res. 1999;59(6): 1231-1235.

Kohri T, et al. Reduction of experimental laser-induced choroidal neovascularization by orally administered BPHA, a selective metalloproteinase inhibitor. Graefes Arch Clin Exp Ophthalmol. 2003;241(11):943-952.

Maki H, et al. Antiangiogenic and antitumor effect of BPHA, an orally-active matrix metalloproteinase inhibitor, in in vivo murine and human tumor model. Gan To Kagaku Ryoho. 1999;26(11):1599-1606.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481