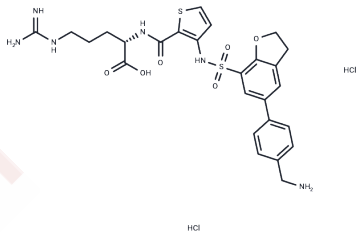
Data Sheet (Cat.No.T11154L)

TargetMol

EG01377 2HCl

Chemical Properties



CAS No. : 2749438-61-5

Formula: C26H32Cl2N6O6S2

Molecular Weight: 659.6

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	EG01377 2HCl is a potent, bioavailable and selective inhibitor of neuropilin-1 (NRP1) with a Kd value of 1.32 μM and an IC50 value of 609 nM for both EG01377 2HCl against NRP1-a1 and NRP1-b1.EG01377 exhibits anti-angiogenic, antimigratory and antitumor activities.
Targets(IC50)	Complement System
In vitro	EG0 1377 2HCl (30 μM) effectively diminishes HUVEC cell migration induced by VEGFA. Additionally, EG01377 2HCl leads to reductions in network area, length, and branching points.[1] EG0 1377 2HCl (3-30 μM; 30 minutes) inhibits vascular endothelial growth factor A (VEGF-A) stimulated tyrosine phosphorylation of VEGF-R2/KDR with an IC50 of 30 μM.[1] EG0 1377 2HCl (30 μM; 5 days) can delay the VEGF-induced wound closure.[1] EG0 1377 2HCl diminishes VEGF-triggered angiogenesis. Moreover, when combined with VEGFA, EG01377 2HCl curtails spheroid outgrowth of A375P (malignant melanoma) cells.[1] EG0 1377 2HCl (500 nM; 2 h) blocks the production of transforming growth factor beta (TGFβ) by Nrp1+ regulatory T-cell SMAD3/AKT (Tregs) in the presence of tumor cell-derived factors.[1]
In vivo	EG0 1377 2HCl (2 mg/kg; i.v.; BABL/c female mice) possesses a half-life of 4.29 hours, allowing for once-a-day dosing to be maintained in mice.[1]

Solubility Information

Solubility	DMSO: 180 mg/mL (272.89 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: 5 mg/mL (7.58 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.5161 mL	7.5804 mL	15.1607 mL
5 mM	0.3032 mL	1.5161 mL	3.0321 mL
10 mM	0.1516 mL	0.758 mL	1.5161 mL
50 mM	0.0303 mL	0.1516 mL	0.3032 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

Powell J, et al. Small Molecule Neuropilin-1 Antagonists Combine Antiangiogenic and Antitumor Activity with Immune Modulation through Reduction of Transforming Growth Factor Beta (TGFβ) Production in Regulatory T-Cells. J Med Chem. 2018;61(9):4135-4154.
Klaewkla M, et al. Molecular basis of the new COVID-19 target neuropilin-1 in complex with SARS-CoV-2 S1 C-end rule peptide and small-molecule antagonists. J Mol Liq. 2021;335:116537.
Zhang P, et al. NRP1 promotes prostate cancer progression via modulating EGFR-dependent AKT pathway activation. Cell Death Dis. 2023;14(2):159.