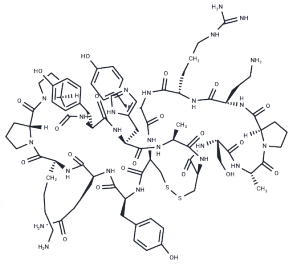
Data Sheet (Cat.No.TP2141L)

TargetMol

Balixafortide

Chemical Properties



CAS No. : 1051366-32-5

Formula: C84H118N24O21S2

Molecular Weight: 1864.14

Storage: Keep away from moisture
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	Balixafortide (POL6326) is a potent, selective, and well-tolerated peptidic CXCR4 antagonist with an IC50 < 10 nM, and also acts as a potent hematopoietic stem and progenitor cell (HSPC) mobilizing agent. It demonstrates anti-cancer effects[1][2], blocks β-arrestin recruitment and calcium flux with IC50s < 10 nM, and is 1000-fold more selective for CXCR4 than a large panel of receptors, including CXCR7.
Targets(IC50)	Arrestin,CXCR
In vitro	Balixafortide efficiently blocks SDF-1 dependent chemotaxis of MDA MB 231 breast cancer cells (IC50 < 20 nM), Namalwa and Jurkat cells (IC50 < 10 nM)[1]. Balixafortide potently inhibits pERK / pAKT signaling in the lymphoma lines Namalwa (IC50< 200 nM) and Jurkat (IC50 < 400 nM).
In vivo	Balixafortide has been optimized to exhibit favorable absorption, distribution, metabolism, and excretion (ADME) characteristics in mice, demonstrating balanced plasma protein binding and enhanced stability in both plasma and microsomes[1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.5364 mL	2.6822 mL	5.3644 mL
5 mM	0.1073 mL	0.5364 mL	1.0729 mL
10 mM	0.0536 mL	0.2682 mL	0.5364 mL
50 mM	0.0107 mL	0.0536 mL	0.1073 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

Zimmermann J, et al. Anti-tumor cell activity and in vitro profile of the next generation CXCR4 antagonist Balixafortide. Ann Oncol. 2018 Oct;29 Suppl 8:viii103.
Karpova D, et al. Mobilization of hematopoietic stem cells with the novel CXCR4 antagonist POL6326 (balixafortide) in healthy volunteers-results of a dose escalation trial. J Transl Med. 2017 Jan 3;15(1):2.

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