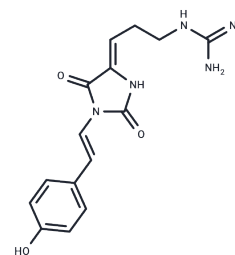


CXCR4 antagonist 7

Chemical Properties

CAS No. :	1185451-72-2
Formula:	C ₁₅ H ₁₇ N ₅ O ₃
Molecular Weight:	315.33
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	CXCR4 antagonist 7 (Compound PARA-B) is a potent CXCR4 inhibitor (IC ₅₀ = 9.3 nM) [1] applicable in research on HIV infection, inflammatory diseases, cancer, and WHIM syndrome.
Targets(IC ₅₀)	Others,HIV Protease,CXCR
In vitro	CXCR4 antagonist 7 (PARA-B, 10 nM to 1 μM, various durations) inhibits GH4C1 cell activities. At 10 nM to 1 μM for 20 hours, it suppresses CXCL12-stimulated GH4C1 proliferation with an IC ₅₀ of 9.3 nM. At 1 μM for 12 hours, it reduces CXCL12-dependent GH4C1 migration by 50%. At 50 nM for 30 minutes, it decreases CXCL12-induced ERK1/2 phosphorylation. It inhibits CXCL12-triggered GH4C1 proliferation and migration via CXCR4 inhibition. At 1 μM for 24 hours, no adverse effects on GH4C1 cell viability were observed. It also inhibits various cancer cell proliferations (10 nM-1 μM, 20-24 hours, IC ₅₀ values 1.08-3.45 μM) without affecting GH4C1 viability. In migration assays (50 nM-1 μM, 12 hours for GH4C1 and 30 minutes for GH4A11), it significantly reduces GH4C1 migration, with no effect on GH4A11 cells, even with CRISPR-Cas9-induced CXCR4 mRNA reduction. Western blot analysis confirms the reduction in CXCL12-induced ERK1/2 phosphorylation at 50 nM for 30 minutes.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1713 mL	15.8564 mL	31.7128 mL
5 mM	0.6343 mL	3.1713 mL	6.3426 mL
10 mM	0.3171 mL	1.5856 mL	3.1713 mL
50 mM	0.0634 mL	0.3171 mL	0.6343 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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