

## TC 14012 hydrochloride

## Chemical Properties

CAS No. :

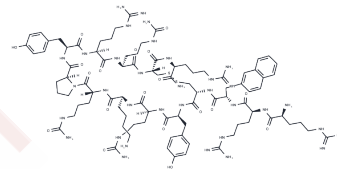
Formula: C90H140N34O19S2.XHCl

Molecular Weight: 2066.42

Keep away from moisture

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	TC 14012, a peptidomimetic compound, acts as both an antagonist to the chemokine (C-X-C motif) receptor 4 (CXCR4; IC <sub>50</sub> = 2.9 nM) and as an agonist for CXCR7, effectively recruiting β-arrestin in HEK293T cells that express CXCR7 (EC <sub>50</sub> = 350 nM). Moreover, it demonstrates significant antiviral activity by reducing the cytopathic effects of HIV in MT-4 cells with an EC <sub>50</sub> value of 0.4 nM and inhibiting HIV entry in vitro through a CXCR4-dependent pathway (IC <sub>50</sub> = 19.3 nM). Additionally, TC 14012 suppresses chemokine (C-X-C motif) ligand 12 (CXCL12)-induced migration in MDA-MB-231 breast cancer and human umbilical vein endothelial cells (HUVECs) within the 10 to 1,000 nM concentration range. In a mouse model, administration of TC 14012 at 10 mg/kg significantly reduced infarct size following acute myocardial infarction induced by ligation of the left anterior descending (LAD) coronary artery.
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## Solubility Information

Solubility	PBS pH 7.2: 10 mg/mL (4.84 mM), Sonication is recommended. DMSO: 10 mg/mL (4.84 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.4839 mL	2.4196 mL	4.8393 mL
5 mM	0.0968 mL	0.4839 mL	0.9679 mL
10 mM	0.0484 mL	0.242 mL	0.4839 mL
50 mM	0.0097 mL	0.0484 mL	0.0968 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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