Data Sheet (Cat.No.TQ0297)

TargetMol

Cenicriviroc

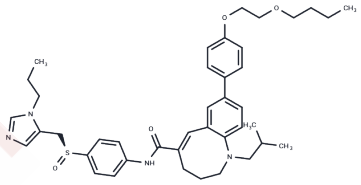
Chemical Properties

CAS No. : 497223-25-3

Formula: C41H52N4O4S

Molecular Weight: 696.94

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	Cenicriviroc (TAK-652) is an orally active, dual CCR2/CCR5 antagonist that inhibits both HIV-1 and HIV-2, exhibiting potent anti-infective and anti-inflammatory activity.
Targets(IC50)	HIV Protease,CCR
In vitro	Cenicriviroc prevents HIV-1 from cellular entry [2]. Regarding the 4 R5 HIV-2 clinical isolates tested, effective concentration 50% EC50 for cenicriviroc are 0.03, 0.33, 0.45 and 0.98 nM. The dual-tropic and the X4-tropic HIV-2 strains are resistant to cenicriviroc with EC50 at >1000 nM, and MPI at 33% and 4%, respectively [3].
In vivo	Cenicriviroc (≥20 mg/kg/day) significantly reduces monocyte/macrophage recruitment in vivo and lowers the non-alcoholic fatty liver disease activity score in the NASH model, without affecting body, liver, or kidney weight [1].
Animal Research	Male C57BL/6 mice (n=44; 8-10 weeks of age) are allocated to receive treatments via oral gavage (PO) on Days 1-5 in the following groups: non-disease control, vehicle control twice daily (BID), Cenicriviroc 5 mg/kg/day (Cenicriviroc5) BID, Cenicriviroc 20 mg/kg/day (Cenicriviroc20) BID, Cenicriviroc 100 mg/kg/day (Cenicriviroc100) BID, Cenicriviroc20 QD, and positive control (corticosteroid known to reduce inflammation in a variety of animal models) 1 mg/kg QD. On Day 4, peritonitis is induced via IP injection of TG 3.85% (1 mL/animal) 2 hours post-dose in all groups except non-disease controls [1].

Solubility Information

Solubility	DMSO: 120 mg/mL (172.18 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: 4 mg/mL (5.74 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	1.4348 mL	7.1742 mL	14.3484 mL
5 mM	0.287 mL	1.4348 mL	2.8697 mL
10 mM	0.1435 mL	0.7174 mL	1.4348 mL
50 mM	0.0287 mL	0.1435 mL	0.287 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

Lefebvre E, et al. Antifibrotic Effects of the Dual CCR2/CCR5 Antagonist Cenicriviroc in Animal Models of Liver and Kidney Fibrosis. PLoS One. 2016 Jun 27;11(6):e0158156

Fan X, Peng Y, Li B, et al.Liver-Secreted Extracellular Vesicles Promote Cirrhosis-Associated Skeletal Muscle Injury Through mtDNA-cGAS/STING Axis.Advanced Science.2025: 2410439.

Kuwata T, et al. Incompatible Natures of the HIV-1 Envelope in Resistance to the CCR5 Antagonist Cenicriviroc and to Neutralizing Antibodies. Antimicrob Agents Chemother. 2015 Nov 2;60(1):437-5

Visseaux B, et al. Cenicriviroc, a Novel CCR5 (R5) and CCR2 Antagonist, Shows In Vitro Activity against R5 Tropic HIV-2 Clinical Isolates. PLoS One. 2015 Aug 6;10(8):e0134904

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