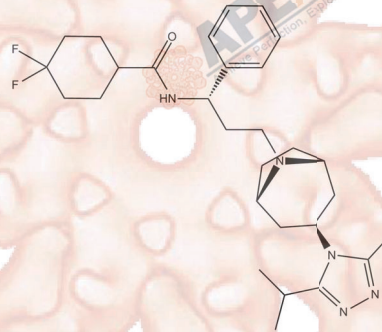


Product Data Sheet

Maraviroc

Cat. No.:	A8311
CAS No.:	376348-65-1
Formula:	C ₂₉ H ₄₁ F ₂ N ₅ O
M.Wt:	513.67
Synonyms:	UK-427857; Selzentry; Celsentri
Target:	Microbiology & Virology
Pathway:	HIV
Storage:	Desiccate at -20°C



Solvent & Solubility

≥25.7mg/mL in DMSO, ≥48 mg/mL in EtOH, insoluble in H₂O

In Vitro

Preparing Stock Solutions	Mass		1mg	5mg	10mg
	Solvent	Concentration			
		1 mM	1.9468 mL	9.7339 mL	19.4678 mL
		5 mM	0.3894 mL	1.9468 mL	3.8936 mL
		10 mM	0.1947 mL	0.9734 mL	1.9468 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

Selective CCR5 antagonist, antiretroviral agent

IC₅₀ & Target

3.3 nM (MIP-1α), 7.2 nM (MIP-1β), 5.2 nM (RANTES)

In Vitro

Cell Viability Assay

Cell Line: PBMC or PM-1 cells

Preparation method: The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20 °C for several months.

Reacting conditions: 0.01 ~ 10 nM; 5 days

Applications: In PBMC or PM-1 cells, Maraviroc was active against HIV-1 Ba-L even at low

		nanomolar concentrations, with the IC90 values ranging from 1.1 nM to 3.1 nM. Meanwhile, Maraviroc showed no effect on cell proliferation at concentrations up to 10 µM.
In Vivo	Animal experiment	
	Animal models:	Rats and dogs
	Dosage form:	74 and 21 ml/min/kg, respectively; i.v.
	Applications:	In rats and dogs, Maraviroc showed moderate to high clearance values, as well as moderate volumes of distribution (4.3 to 6.5 liters/kg). For rats and dogs, the half-life values of Maraviroc were 0.9 hr and 2.3 hrs, respectively.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

1.van Attekum MH, Terpstra S, et al. "Macrophages confer survival signals via CCR1-dependenttranslational MCL-1 induction in chronic lymphocytic leukemia." Oncogene. 2017 Feb13.PMID:28192408

See more customer validations on www.apexbt.com.

References

[1]. Dorr P, Westby M, Dobbs S, et al. Maraviroc (UK-427,857), a potent, orally bioavailable, and selective small-molecule inhibitor of chemokine receptor CCR5 with broad-spectrum anti-human immunodeficiency virus type 1 activity. Antimicrob Agents Chemother, 2005, 49(11): 4721-4732.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.



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