Overview

Product name: AMD3100 octahydrochloride, CXCR4 antagonist

Description: Highly selective CXCR4 antagonist

Biological description: Plerixafor (hydrochloride) is a macrocyclic compound that acts as an irreversible antagonist against the binding of CXCR4 with its ligand, SDF-1 (CXCL12).

It suppresses infection by HIV with an IC$_{50}$ value of 1-10 ng/ml with selectivity toward CXCR4-tropic virus. Plerixafor mobilizes hematopoietic stem and progenitor cells for transplant better than G-CSF alone. It also increases T-cell trafficking in the blood and spleen as well as the central nervous system. Plerixafor regulates the growth of primary and metastatic breast cancer cells and inhibits dissemination of ovarian carcinoma cells.

Purity: > 99%

Properties

Chemical name: 1,1’-[1,4-Phenylenebis(methylene)]bis-1,4,8,11-tetraazacyclotetradecane octahydrochloride

Molecular weight: 794.48

Molecular formula: C$_{28}$H$_{54}$N$_{8}$·8HCl

CAS Number: 155148-31-5

PubChem identifier: 65014

Storage instructions: Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12 months.

Solubility overview: Soluble in water to 100 mM

Handling: Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and
prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.

Need more advice on solubility, usage and handling? Please visit our frequently asked questions (FAQ) page for more details.

**SMILES**

C1CNCCNCCN(CC1)CC=CC(C=C2)CN3CCNCCNCCNCC3.Cl.Cl.Cl.Cl.Cl.Cl.Cl.Cl.

**Source**

Synthetic

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**Please note:** All products are “FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE, NOT FOR USE IN HUMANS”

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- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit [https://www.abcam.com/abpromise](https://www.abcam.com/abpromise) or contact our technical team.

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- Abcam biochemicals are novel compounds and we have not tested their biological activity in house. Please use the literature to identify how to use these products effectively. If you require further assistance please contact the scientific support team