Product datasheet

Plerixafor (hydrochloride hydrate) ab120718

7 References

Overview

- **Product name**: Plerixafor (hydrochloride hydrate)
- **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
- **Chemical structure**

![Chemical structure of Plerixafor](image)

- **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)CC2=CC=C(C=C2)CN3CCCNCCCNCC3.Cl.Cl.Cl.Cl.Cl.Cl.Cl.Cl.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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