



Data Sheet

Research Use Only

Compound Name

Plerixafor

Catalog Number

SM78

Activity

Plerixafor is a bicyclam molecule that antagonizes the binding of the chemokine stromal cell-derived factor-1 (SDF-1) to its cognate receptor CXCR4. The CXCR4 alpha-chemokine receptor and one of its ligands, SDF-1, are important in hematopoietic stem cell homing to the bone marrow and in hematopoietic stem cell quiescence.

Purity

>98%

Formula

C₂₈H₅₄N₈

Solubility

DMSO

Alternative Names

AMD3100, 1,1'-(1,4-Phenylenebis(methylene))bis-1,4,8,11-tetraazacyclotetradecane

Effect

Plerixafor is one of the most efficient bone marrow stem cell mobilizers. Plerixafor results in the rapid and reversible mobilization of hematopoietic stem cells (HSC) into the peripheral circulation and is synergistic when combined with G-CSF.

CAS

110078-46-1

Molecular Weight

502.78

Stability

Stable at -20°C. Keep away from direct sunlight.

References

1. Uy, GL. 2008. Expert Opin Biol Ther. 8(11): 1797-1804. PMID: 18847313
2. Kim, JH., et al. 2012. Radiat Res. 178(3): 202-206. PMID: 22799631
3. Langle, D., et al. 2014. ACS Chem Biol. 9(1): 57-71, PMID: 24372447
4. Lee, SY., et al. 2014. Amyloid. epub. PMID: 24779777