

Product Name: AMD 3465 hexahydrobromide

Catalog No.: 4179

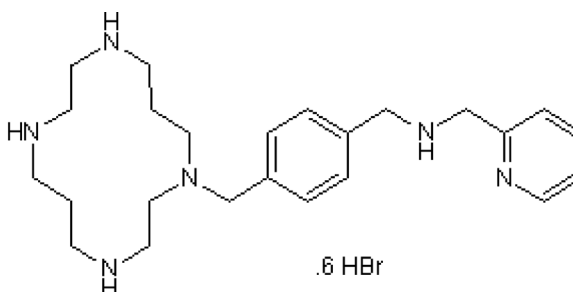
Batch No.: 2

CAS Number: 185991-07-5

IUPAC Name: *N*-[[4-(1,4,8,11-Tetraazacyclotetradec-1-ylmethyl)phenyl]methyl]-2-pyridinemethanamine hexahydrobromide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₄H₃₈N₆.6HBr
Batch Molecular Weight: 896.07
Physical Appearance: Off White solid
Solubility: water to 50 mM
DMSO to 25 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 97.2% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	32.17	4.95	9.38
Found	32.38	5.2	9.53

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

AMD 3465 hexahydrobromide is a potent, selective CXCR4 antagonist; exhibits 8-fold higher affinity than AMD 3100 (Cat.No. 3299). Inhibits SDF-1 α -ligand binding (K_i = 41.7 nM). Potently inhibits HIV cell entry in vitro; causes leukocytosis and mobilizes haematopoietic stem cells in vivo.

Physical and Chemical Properties:

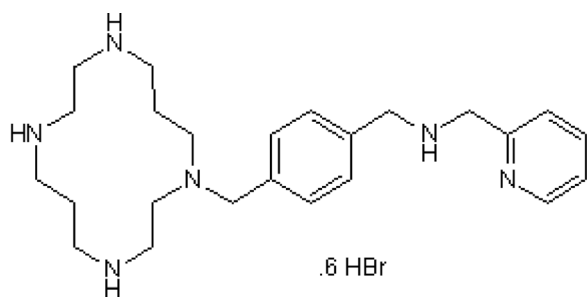
Batch Molecular Formula: C₂₄H₃₈N₆.6HBr

Batch Molecular Weight: 896.07

Physical Appearance: Off White solid

Minimum Purity: \geq 97%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

water to 50 mM

DMSO to 25 mM

This compound is hygroscopic and may absorb atmospheric moisture during prolonged storage, causing the solid to become sticky and/or collapse into a gel or glass-like form. Although purity is unaffected, it may be difficult to extract the full quantity from the vial. In such a situation, we recommend that solutions are made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Bodart et al (2009) Pharmacology of AMD3465: A small molecule antagonist of the chemokine receptor CXCR4. *Biochem.Pharmacol.* **78** 993. PMID: 19540208.

Rosenkilde et al (2007) Molecular mechanism of action of monocyclam versus bicyclam non-peptide antagonists of the CXCR4 chemokine receptor. *J.Biol.Chem.* **282** 27354. PMID: 17599916.

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