



Certificate of Analysis

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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



Product Information

Print Date: Jan 3rd 2020

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Description:

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: ≥97%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

water to 50 mM DMSO to 25 mM

CAUTION - This product is hygroscopic and we recommend that it is desiccated upon arrival.

Catalog No.: 4179

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. Our standard recommendations are:

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.