

Product Name: Kifunensine

Catalog No.: 3207

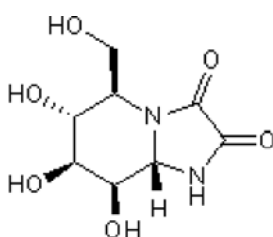
Batch No.: 7

CAS Number: 109944-15-2

IUPAC Name: (5*R*,6*R*,7*S*,8*R*,8*aS*)-Hexahydro-6,7,8-trihydroxy-5-(hydroxymethyl)-imidazo[1,2-*a*]pyridine-2,3-dione

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₈H₁₂N₂O₆
Batch Molecular Weight: 232.19
Physical Appearance: White solid
Solubility: water to 5 mM with sonication
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	41.38	5.21	12.06
Found	41.46	5.16	11.91

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

Product Name: Kifunensine

Catalog No.: 3207

Batch No.: 7

CAS Number: 109944-15-2

IUPAC Name: (5*R*,6*R*,7*S*,8*R*,8*aS*)-Hexahydro-6,7,8-trihydroxy-5-(hydroxymethyl)-imidazo[1,2-*a*]pyridine-2,3-dione

Description:

Inhibitor of class I α -mannosidases that inhibits glycoprotein processing. Inhibits human endoplasmic reticulum α -1,2-mannosidase I and Golgi Class I mannosidases IA, IB and IC with K_i values of 130 and 23 nM respectively.

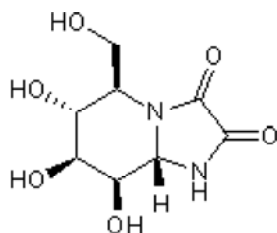
Physical and Chemical Properties:

Batch Molecular Formula: C₈H₁₂N₂O₆

Batch Molecular Weight: 232.19

Physical Appearance: White solid

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

water to 5 mM with sonication

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be 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. 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:

Hering et al (2005) A practical synthesis of kifunensine analogues as inhibitors of endoplasmic reticulum α -Mannosidase I. *J.Org.Chem.* **70** 9892. PMID: 16292820.

Elbein et al (1990) Kifunensine, a potent inhibitor of the glycoprotein processing mannosidase I. *J.Biol.Chem.* **265** 1559.

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

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956