### 1. PHYSICAL AND CHEMICAL PROPERTIES

- **Batch Molecular Formula:** \( \text{C}_8\text{H}_{12}\text{N}_2\text{O}_6 \)
- **Batch Molecular Weight:** 232.19
- **Physical Appearance:** White solid
- **Solubility:** water to 10 mM with sonication
- **Storage:** Store at -20°C

![Batch Molecular Structure](image)

### 2. ANALYTICAL DATA

- **HPLC:** Shows 99.9% purity
- **\(^1\)H NMR:** Consistent with structure
- **Mass Spectrum:** Consistent with structure
- **Microanalysis:**
  
<table>
<thead>
<tr>
<th>Element</th>
<th>Theoretical</th>
<th>Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>41.38%</td>
<td>41.31%</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>5.21%</td>
<td>5.2</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>12.06%</td>
<td>11.99%</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Product Name: Kifunensine
Catalog No.: 3207
Batch No.: 4

CAS Number: 109944-15-2
IUPAC Name: (5R,6R,7S,8R,8aS)-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 Kᵢ values of 130 and 23 nM respectively.

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Solubility & Usage Info:
water to 10 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: