



## CERTIFICATE OF ANALYSIS

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### 1. Identification

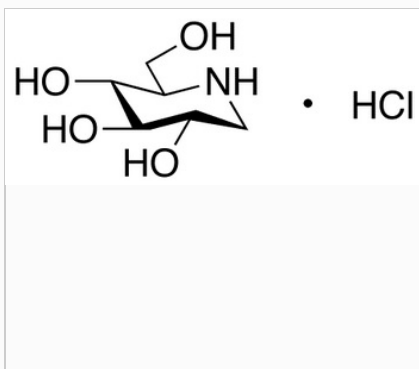
**Catalogue Number:** D245005

**CAS Number:** 73285-50-4

**Product:** Deoxynojirimycin Hydrochloride

**Synonym:** (2R,3R,4R,5S)-2-(Hydroxymethyl)-3,4,5-piperidinetriol Hydrochloride; 1-Deoxynojirimycin Hydrochloride; AT 2220; Duvoglustat Hydrochloride; Moranoline Hydrochloride; DNJ Hydrochloride

**Structure:**



**Molecular Formula:**

$C_6H_{14}ClNO_4$

**Molecular weight:**

199.63

**Source of Product:**

Synthetic

**Solubility:**

Methanol (Very Slightly, Heated), Water (Slightly)

**Lot Number:** 1-AMC-185-8

**Purity:** 98%

**Shipping Condition:** This Product Is Stable To Be Shipped At Room Temperature

**Storage Condition:** -20°C

### 2. Warning

**Warning 1:** Not Determined

**Warning 2:**

**Warning 3:**

### 3. Analytical Information

Tests:	Specifications:	Results:
Appearance	White to Off-White Solid	White to Off-White Solid
Melting Point	>200°C	207 - 209°C
H NMR	Conforms to Structure	Conforms
Elemental Analysis	Conforms	%C: 36.09, %H: 7.10, %N: 6.97
MS	Conforms to Structure	Conforms
Chloride Content	(Calc.) 17.76%	17.29% by Ion Chromatography
Specific Rotation	> 31° (c = 0.2, Water)	+38.4° (c = 0.2, Water)
HPLC Purity	>95%	100%

**Additional Information:**

TLC Conditions: C18; Methanol : Ethyl Acetate : Ammonium Hydroxide = 6 : 3 : 1; Visualized with KMnO<sub>4</sub> and Ninhydrin; Single Spot, R<sub>f</sub> = 0.70. <sup>1</sup>H NMR and MS conform to structure. Elemental Analysis: (Found) %C: 36.09, %H: 7.10, %N: 6.97; (Calculated) %C: 36.10, %H: 7.07, %N: 7.02 Chloride Content: 17.29% by Ion Chromatography Specific Rotation: +38.4° (c = 0.2, Water)

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of ± 2%. Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

### 4. Signatures

<b>Reviewed By</b>	<b>Reviewed By</b>	<b>C of A Approved By</b>	<b>Test Date</b>	<b>Retest Date</b>
Rhonda Tu	Eric Beaton		8/8/2018	8/6/2028
<i>RTU</i>	<i>EB</i>			