



CERTIFICATE OF ANALYSIS

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1. Identification

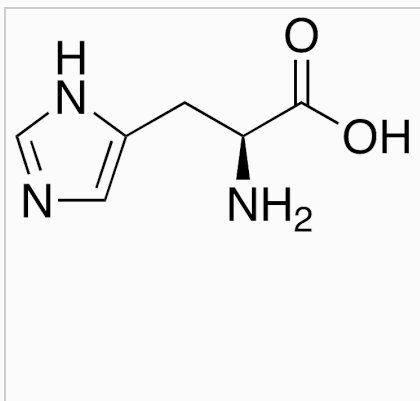
Catalogue Number: H456010

CAS Number: 71-00-1

Product: L-Histidine

Synonym: (2S)-2-Amino-3-(1H-imidazol-4-yl)propanoic Acid; (S)-Histidine; L-(-)-Histidine; (S)-4-(2-Amino-2-carboxyethyl)imidazole; (S)-α-Amino-1H-imidazole-4-propanoic Acid; 1448: PN: EP2071334 SEQID: 1532 claimed protein; NSC 137773; 1448: PN: WO2009077864 SEQID: (S)-1H-Imidazole-4-alanine; PN: WO2009046220 SEQID: 343 claimed sequence; Glyoxaline-5-alanine; Histidine; 3-(1H-Imidazol-4-yl)-L-alanine;

Structure:



Molecular Formula:

C₆H₉N₃O₂

Molecular weight:

155.15

Source of Product:

N/A

Solubility:

Aqueous Acid (Slightly, Sonicated), Water (Sparingly, Heated, Sonicated)

Lot Number: 1-HBN-133-1

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
NMR	Conforms to Structure	Conforms
C NMR	Conforms to Structure	Conforms
Elemental Analysis	Conforms	%C: 46.47, %H: 5.67, %N: 27.17
MS	Conforms to Structure	Conforms
Specific Rotation	Report Result	-38.9° (c = 1.0, Water)
HPLC Purity	Report Result	99.97% (220 nm)

Additional Information:

TLC Conditions: C18; Isopropanol : Water = 6 : 4; Visualized with KMnO₄ and Ninhydrin; Single Spot, R_f = 0.25. Elemental Analysis: (Theoretical) %C: 46.45, %H: 5.85, %N: 27.08

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

Reviewed By	Reviewed By	C of A Approved By	Test Date	Retest Date
Neha Khanna	Neha Khanna	My Nguyen	9/4/2019	9/2/2026
