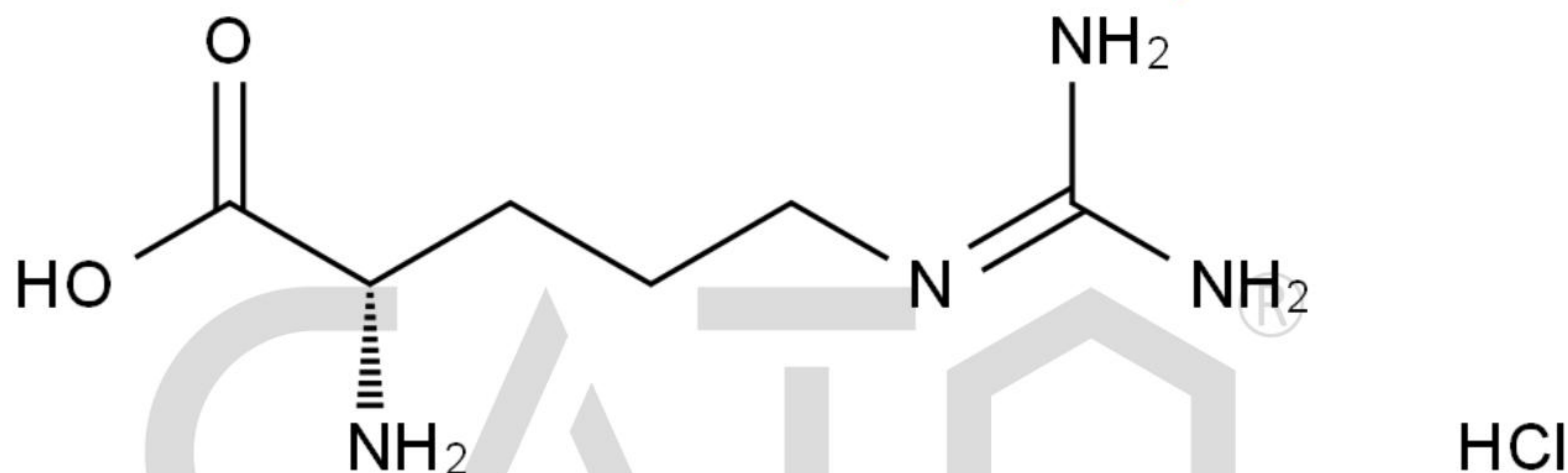


Certificate of Analysis

Reference Material & Standard

Product Name:	L-(+)-Arginine Hydrochloride	Catalogue Number:	CCHM701475
Synonyms:	N/A	Lot Number:	1127-RE-0032
CAS Number:	1119-34-2	Expiry Date:	Nov 26, 2027
Molecular Formula:	C ₆ H ₁₄ N ₄ O ₂ HCl	Storage:	Room Temp Protected from light and Sealed
Molecular Weight:	174.20 36.46	Warning:	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White Solid
Identification	LCMS&HNMR	Confirmed
Purity	ELSD	100.0%
Assay	qNMR	99.7%
Uncertainty		±2.0%

Comment:

1. Assay was determined by quantitative ¹H-NMR.
2. The uncertainty values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Signature:

Prepared by:

Nice

Reviewed by:

Lisa

Aporoved by General Manager:

David

Date: Nov 27, 2023

Date: Nov 27, 2023

Date: Nov 27, 2023

