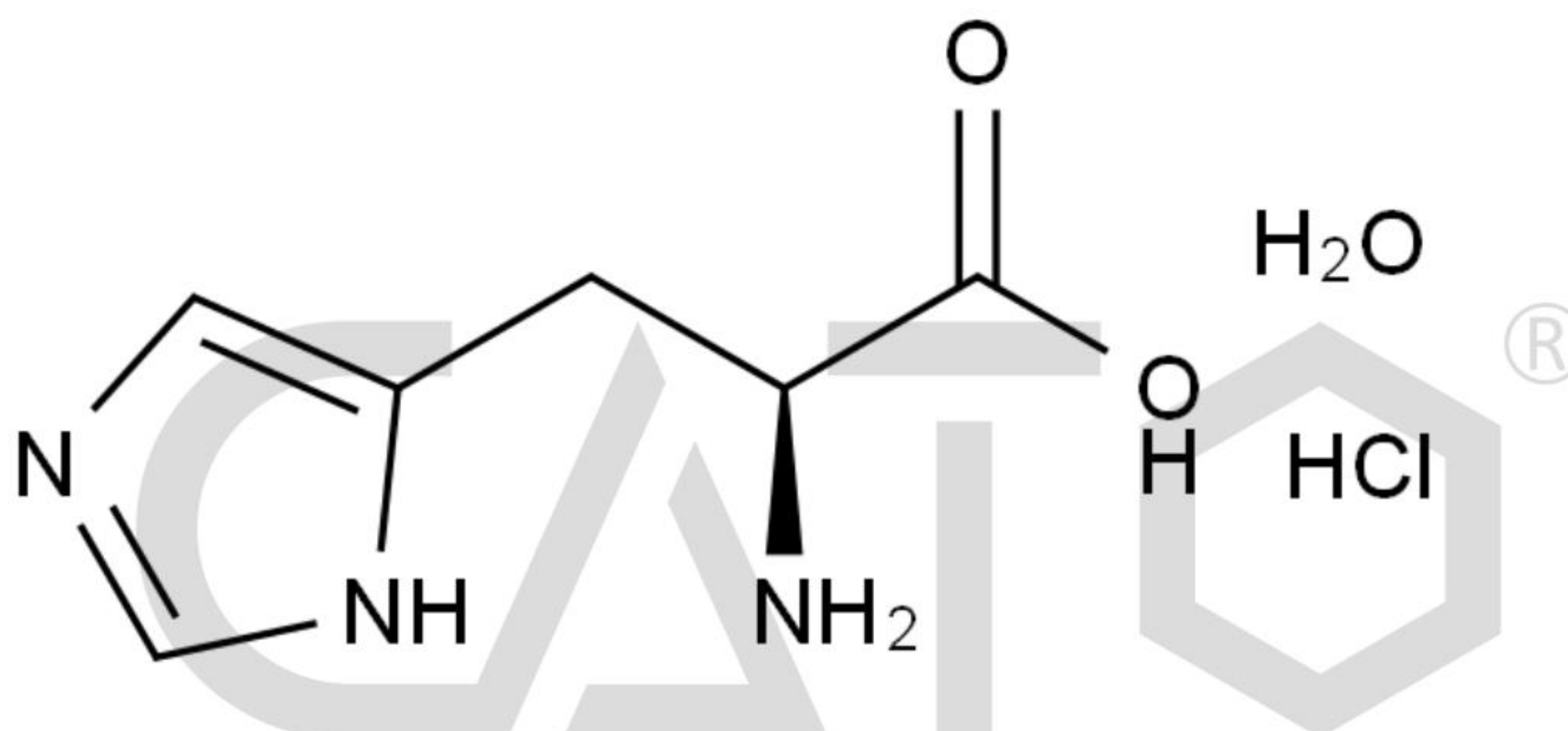


Certificate of Analysis

Reference Material & Standard

Product Name:	L-Histidine Hydrochloride Monohydrate	Catalogue Number:	CCFD200595
Synonyms:	N/A	Lot Number:	0819-RF-0150
CAS Number:	5934-29-2	Expiry Date:	Aug 18, 2028
Molecular Formula:	C ₆ H ₉ N ₃ O ₂ HCl H ₂ O	Storage:	Room Temp Protected from light and Sealed
Molecular Weight:	155.15 36.46 18.02	Warning:	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White Solid
Identification	LCMS&HNMR	Confirmed
Purity	HPLC	100.000%
Loss On Drying	TGA	8.5997%
Loss On Drying(Free Water)		0.0036%
Assay		100.0%
Uncertainty		±2.0%

Comment:

- The content of crystal water is 8.5961%.
- The calculation of the 100% method follows the formula (calculated on the non-dried basis):

$$\text{Assay (\%)} = (100\% - \text{Loss On Drying(Free Water)}) * \text{Purity HPLC (\%)} / 100\%$$
 Loss On Drying(Free Water) is considered as absolute effect, HPLC purity is considered as relative effect.
- 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

Approved by General Manager:

David

Date: Aug 19, 2024

Date: Aug 19, 2024

Date: Aug 19, 2024

