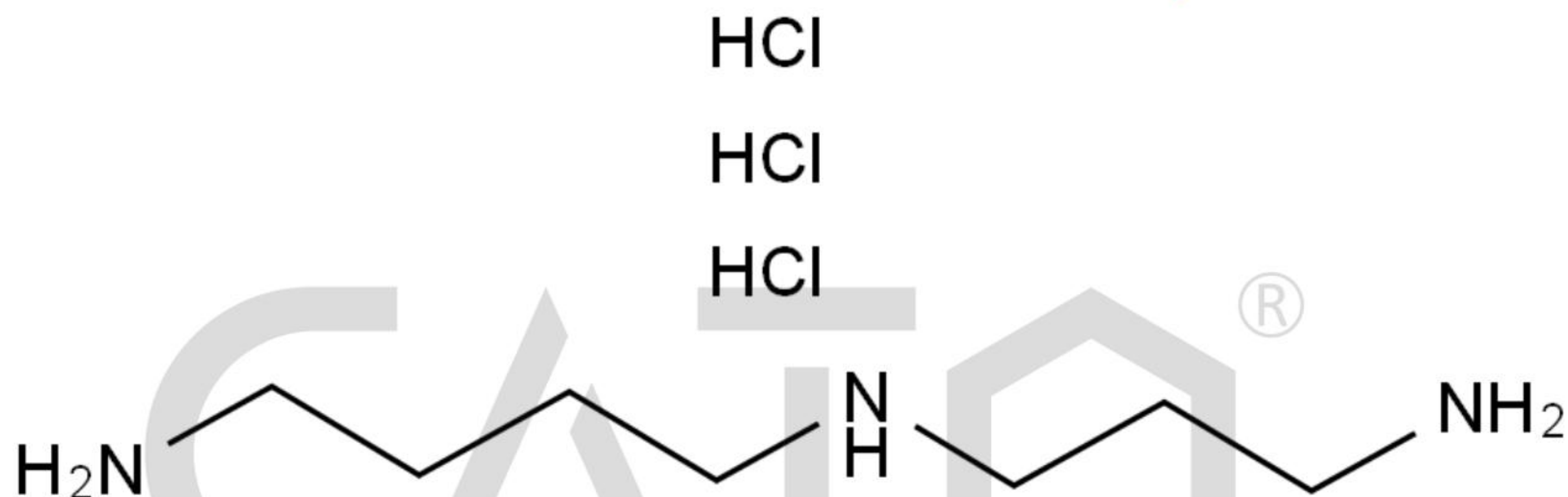


Certificate of Analysis

Reference Material & Standard

Product Name:	Spermidine Trihydrochloride	Catalogue Number:	CCAD300420
Synonyms:	N/A	Lot Number:	0205-RF-0030
CAS Number:	334-50-9	Expiry Date:	Feb 04, 2028
Molecular Formula:	C ₇ H ₁₉ N ₃ 3*HCl	Storage:	Room Temp Protected from light and Sealed
Molecular Weight:	145.25 3*36.46	Warning:	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White Solid
Identification	LCMS&HNMR	Confirmed
Purity	ELSD	100.0%
Assay	qNMR	99.5%
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

Aproved by General Manager:

David

Date: Feb 05, 2024

Date: Feb 05, 2024

Date: Feb 05, 2024

