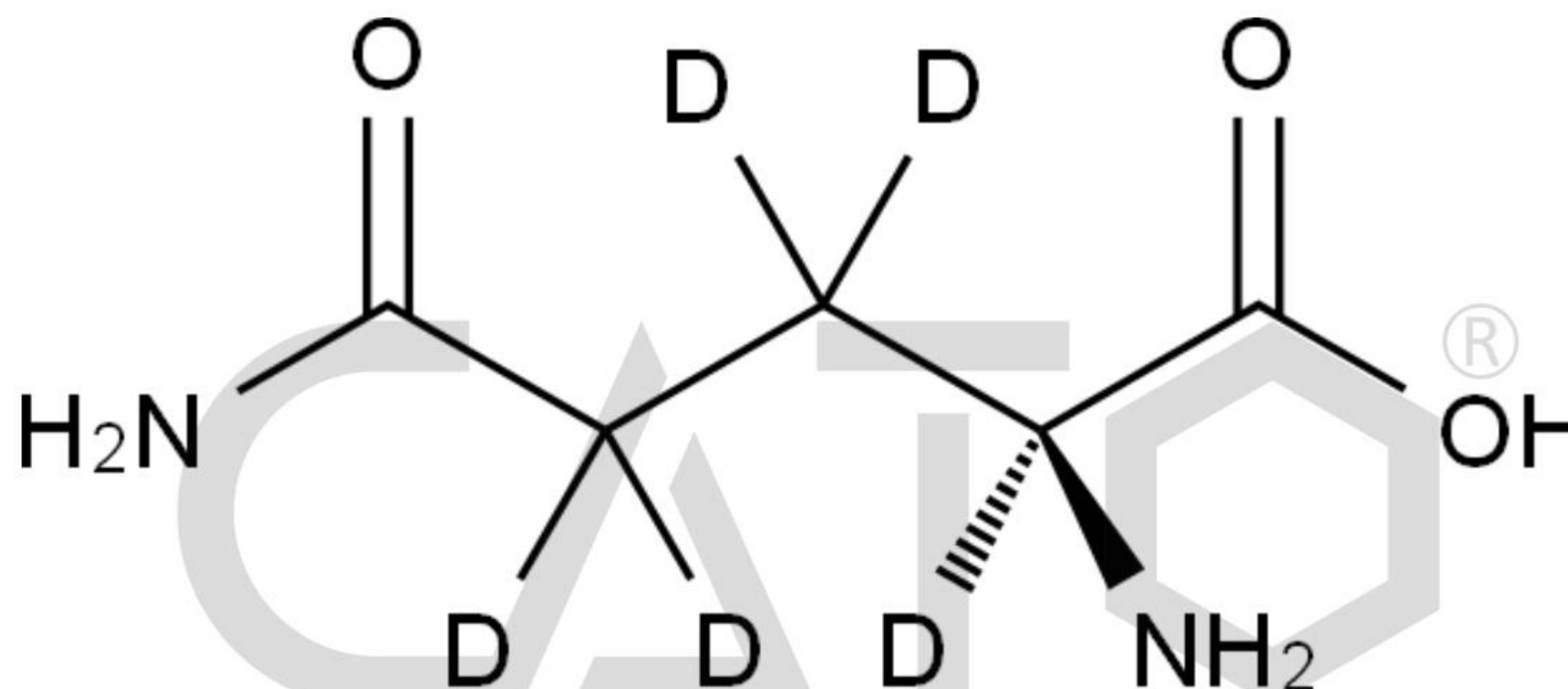


Certificate of Analysis

Reference Material & Standard

Product Name:	L-Glutamine-2,3,3,4,4-d5	Catalogue Number:	CCFD201207
Synonyms:	N/A	Lot Number:	0325-RC-0102
CAS Number:	14341-78-7	Expiry Date:	Feb 03, 2025
Molecular Formula:	C ₅ H ₅ D ₅ N ₂ O ₃	Storage:	-20°C±5°C Protected from light and Sealed
Molecular Weight:	151.18	Shipping Condition:	Shipping with Ice Packs

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White to Off-White Solid
Identification	LCMS&HNMR	Confirmed
Chemical Purity	NMR	98.0%
Isotopic Purity		97.69%
Uncertainty		±2.0%

Comment:

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: Admin

Reviewed by:

Debia

Approved by General Manager:

David

Date: Mar 30, 2021

Date: Mar 30, 2021

Date: Mar 30, 2021

