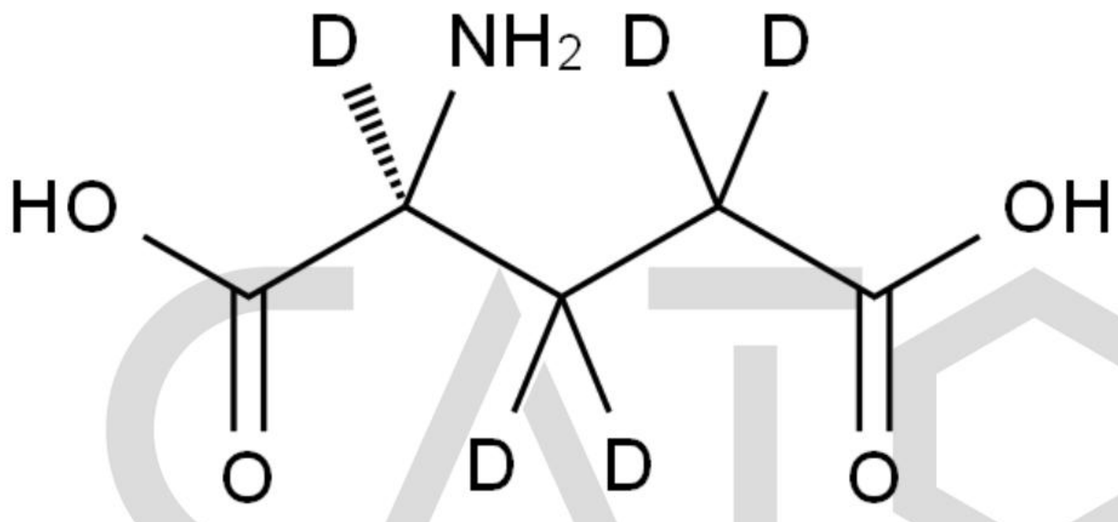
Certificate of Analysis

Reference Material & Standard

Product Name:	L-Glutamic-2,3,3,4,4-d5 Acid	**Catalogue Number:**	CCFD200697
Synonyms:	N/A	**Lot Number:**	0906-RH-0009
CAS Number:	2784-50-1	**Expiry Date:**	Jan 22, 2031
Molecular Formula:	$C_5H_4D_5NO_4$	**Storage:**	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	152.16	**Shipping Condition:**	Shipping at Room Temperature

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White to Off-White Solid
Chemical Purity	HPLC	99.8%
Isotopic Purity		98.0%
Uncertainty		±0.1%

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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: Lisa Date: Sep 09, 2026

Reviewed by: Hinlam Date: Sep 09, 2026

Approved by General Manager: David Date: Sep 09, 2026

CATO Research Chemicals Inc.