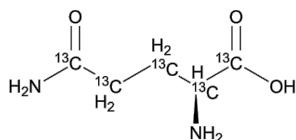


Certificate of Analysis

Product Name: L-Glutamine-13C5
Cat. No.: GC65971
Batch No.: 3
Chemical Name: -

PHYSICAL AND CHEMICAL PROPERTIES

Cas. No.: 184161-19-1
Molecular Formula: $^{13}\text{C}_5\text{H}_{10}\text{N}_2\text{O}_3$
Molecular Weight: 151.11
Storage: Store at -20°C
Chemical Structure:



ANALYTICAL DATA

Appearance: A solid
 ^1H NMR Spectrum: Consistent with structure
LCMS: Consistent with structure
Purity(HPLC): 99.88%
Isotopic Enrichment: 98.27%
Additional Information: $^{13}\text{C}5=94.121\%$, $^{13}\text{C}4=4.499\%$, $^{13}\text{C}2=1.379\%$
Conclusion: The product has been tested and complies with the given specifications.

Caution: Product has not been fully validated for medical applications. For research use only.

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