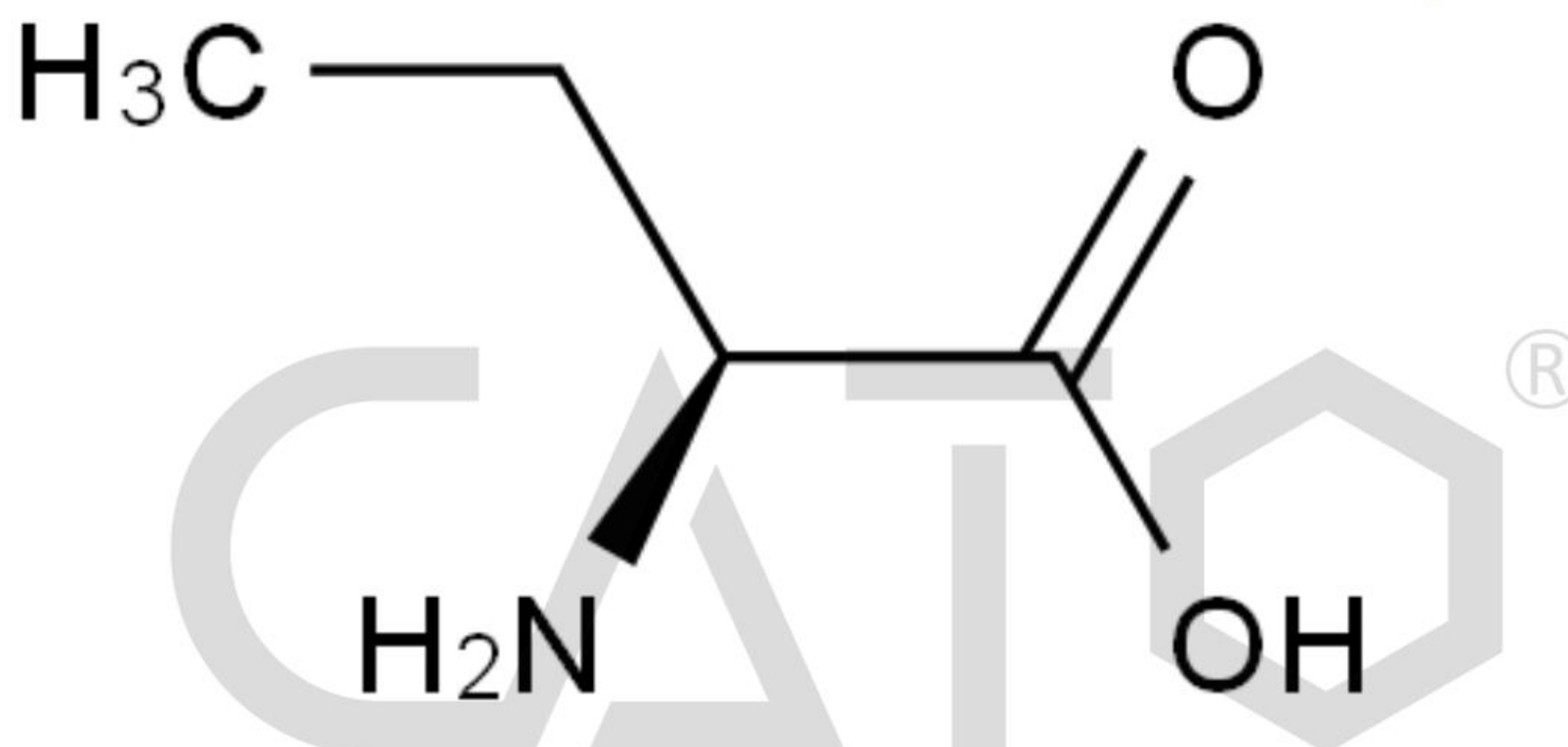


Certificate of Analysis

Reference Material & Standard

Product Name:	(S)-(+)-2-Aminobutyric Acid	Catalogue Number:	CCFD200759
Synonyms:	N/A	Lot Number:	0925-RF-0061
CAS Number:	1492-24-6	Expiry Date:	Sep 24, 2028
Molecular Formula:	C ₄ H ₉ NO ₂	Storage:	-20°C±5°C Protected from light and Sealed
Molecular Weight:	103.12	Warning:	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Off-White Solid
Identification	LCMS&HNMR	Confirmed
Purity	ELSD	95.381%
Water Content	Karl Fischer	0.1713%
Assay		95.2%
Uncertainty		±2.0%

Comment:

1. The calculation of the 100% method follows the formula (calculated on the non-dried basis):

Assay (%) = (100% - Water Content) * Purity ELSD (%) / 100%

Water Content is considered as absolute effect, ELSD purity is considered as relative effect.

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:

Lisa

Reviewed by:

Hin Lam

Approved by General Manager:

David

Date: Sep 25, 2024

Date: Sep 25, 2024

Date: Sep 25, 2024

