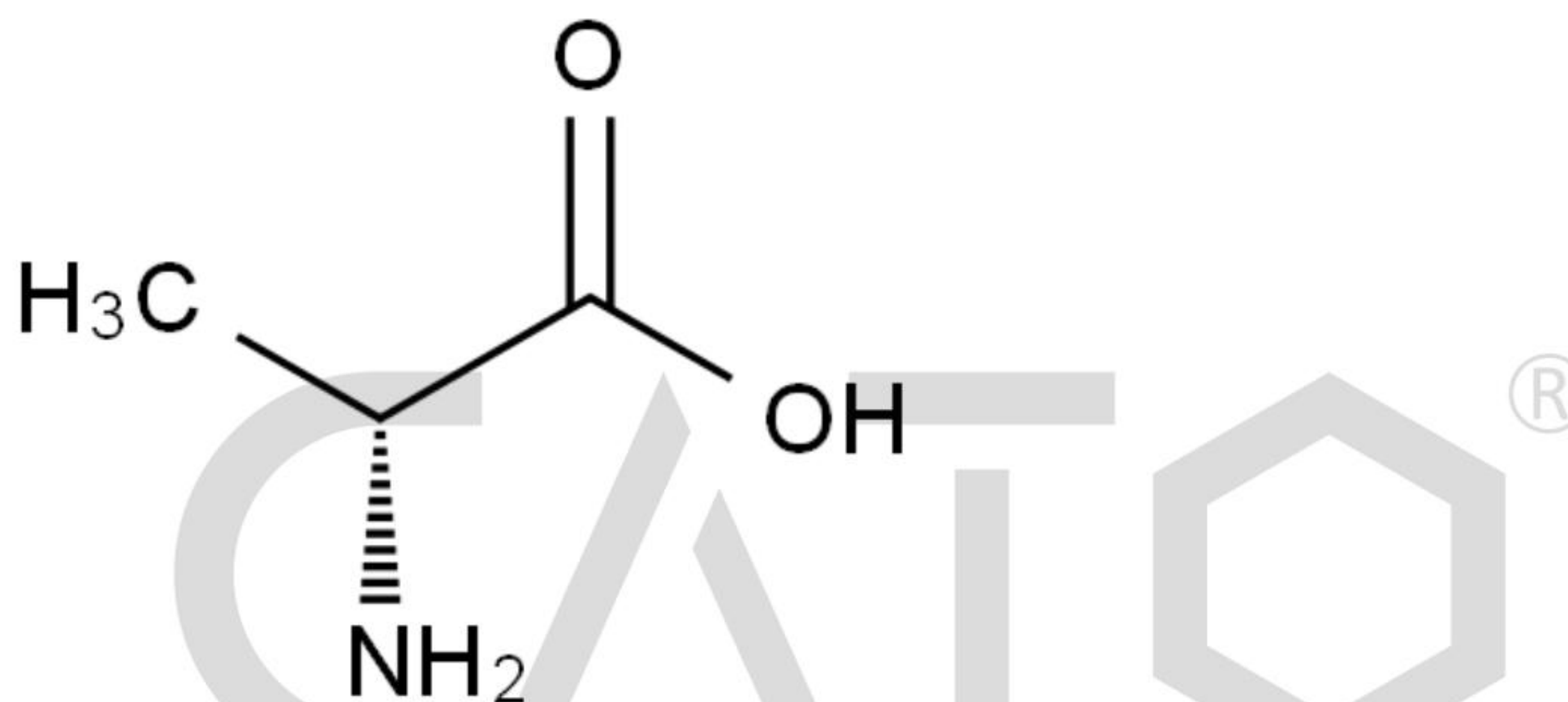


Certificate of Analysis

Reference Material & Standard

Product Name:	D-Alanine	Catalogue Number:	C3D-2815
Synonyms:	N/A	Lot Number:	166-12-20-1
CAS Number:	338-69-2	Expiry Date:	Jun 14, 2030
Molecular Formula:	C ₃ H ₇ NO ₂	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	89.09	Shipping Condition:	Shipping at Room Temperature

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White to Off-White Solid
Identification	LCMS&CNMR&HNMR	Confirmed
Purity	ELSD	99.607%
Water Content	Karl Fischer	0.2218%
Residual Solvents	NMR	Not detected in NMR
Assay		99.4%

Comment:

The calculation of the mass balance method follows the formula (calculated on the non-dried basis):

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

Water Content and Residual Solvents are considered as absolute effect, ELSD purity is considered as relative effect.

Signature:

Prepared by:

Nice

Reviewed by:

Hin Lam

Approved by General Manager:

David

Date: Jun 15, 2026

Date: Jun 16, 2026

Date: Jun 16, 2026



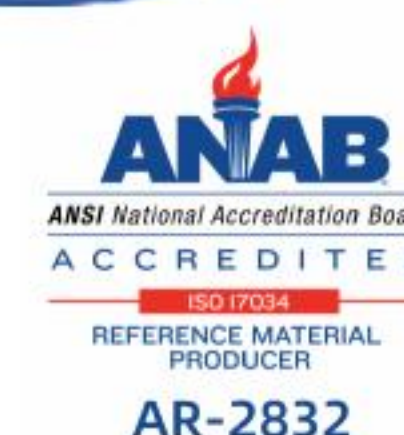
Add: 3rd Floor, Building B, No.179, Guangpu Rd East, Huangpu District, Guangzhou, China

Tel: +86-20-81960175

Email: supports@cato-chem.com

Web: <https://www.cato-chem.com>

Page 1 of 6



Official
WeChat