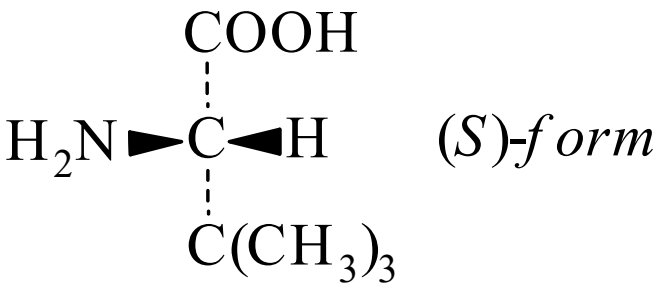
>>**Entry Name: 2-Amino-3,3-dimethylbutanoic acid**
Synonym(s): 3-Methylvaline, 9CI. *tert*-Butylglycine. *tert*-Leucine. 2-Aminoneohexanoic acid. Bug. Pseudoleucine. ψ-Leucine



CAS Registry Number: 471-50-1
Related CAS Registry Numbers(s): 75158-12-2

Molecular Formula: $C_6H_{13}NO_2$
Molecular Weight: 131.174
Accurate Mass: 131.094629
Percentage Composition: C 54.94%; H 9.99%; N 10.68%; O 24.39%

>>**Variant:** (*R*)-form

Molecular Formula: $C_6H_{13}NO_2$
Molecular Weight: 131.174
Accurate Mass: 131.094629
Percentage Composition: C 54.94%; H 9.99%; N 10.68%; O 24.39%

>>**Derivative:** *tert*-Butyl ester

CAS Registry Number: 61169-85-5
Molecular Formula: $C_{10}H_{21}NO_2$
Molecular Weight: 187.281
Accurate Mass: 187.157229
Percentage Composition: C 64.13%; H 11.30%; N 7.48%; O 17.09%
Melting Point: Mp 157.5-158.5° (as acid oxalate)
Boiling Point: Bp_{21} 90-91°
Optical Rotation: $[\alpha]_D^{20}$ –1.57 (neat) (93.5% op)

>>**Variant:** (*S*)-form
Synonym(s): L-form

CAS Registry Number: 20859-02-3

Molecular Formula: $C_6H_{13}NO_2$
Molecular Weight: 131.174
Accurate Mass: 131.094629
Percentage Composition: C 54.94%; H 9.99%; N 10.68%; O 24.39%
Biological Source: Residue from Bottromycin GQN88-M
Use/Importance: Chiral inducer in asymmetric syntheses. Leucine analogue in modified peptides
Melting Point: Mp 248 dec.°
Optical Rotation: $[\alpha]_D^{25}$ –9.5 (c, 3 in H_2O). $[\alpha]_D^{25}$ +8.7 (c, 3 in 5*M* HCl)
Other Data: Varying optical rotations have been reported
Aldrich: 26910-7
Fluka: 61825
Sigma: B9013
Other: Chiroscience

>>**Derivative:** Me ester

CAS Registry Number: 63038-26-6
Molecular Formula: $C_7H_{15}NO_2$
Molecular Weight: 145.201
Accurate Mass: 145.110279
Percentage Composition: C 57.90%; H 10.41%; N 9.65%; O 22.04%
Melting Point: Mp 170°
Optical Rotation: $[\alpha]_D^{23}$ +17 (c, 1 in MeOH)