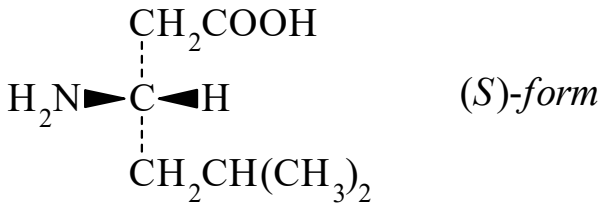
>>**Entry Name: 3-Amino-5-methylhexanoic acid,** 9CI
Synonym(s): β-Homoleucine



(*S*)-*form*

CAS Registry Number: 3653-34-7
Related CAS Registry Numbers(s): 96386-92-4
Extra CAS Registry Numbers(s): 91298-67-8

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%

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

CAS Registry Number: 22818-43-5
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%
Physical Description: Cryst. (EtOH aq.)
Melting Point: Mp 225° (215-216°)
Optical Rotation: $[\alpha]_D$ +28 (c, 3 in H_2O). $[\alpha]_D$ +38.4 (c, 0.54 in H_2O)

>>**Derivative:** *N*-Ac, Me ester

CAS Registry Number: 136744-89-3
Molecular Formula: $C_{10}H_{19}NO_3$
Molecular Weight: 201.265
Accurate Mass: 201.136494
Percentage Composition: C 59.68%; H 9.51%; N 6.96%; O 23.85%
Optical Rotation: $[\alpha]_D^{25}$ –42 (c, 1.06 in $CHCl_3$)

>>**Derivative:** *N*-(4-Methylbenzenesulfonyl)

CAS Registry Number: 22818-42-4
Physical Description: Cryst. (Et_2O/petrol)
Melting Point: Mp 109.5-111°

>>**Derivative:** *N*-(9-Fluorenylmethoxycarbonyl)

CAS Registry Number: 193887-44-4
Molecular Formula: $C_{22}H_{25}NO_4$
Molecular Weight: 367.444
Accurate Mass: 367.178359
Percentage Composition: C 71.91%; H 6.86%; N 3.81%; O 17.42%
Physical Description: Cryst. ($CHCl_3$/hexane)
Melting Point: Mp 108-110°
Optical Rotation: $[\alpha]_D$ –22.2 (c, 1.12 in $CHCl_3$)

>>**Derivative:** *N*-(9-Fluorenylmethoxycarbonyl), Me ester

CAS Registry Number: 193954-35-7
Molecular Formula: $C_{23}H_{27}NO_4$
Molecular Weight: 381.471
Accurate Mass: 381.194009
Percentage Composition: C 72.42%; H 7.13%; N 3.67%; O 16.78%
Physical Description: Cryst.
Melting Point: Mp 74-76°
Optical Rotation: $[\alpha]_D$ –34 (c, 0.85 in $CHCl_3$)