Optical Rotation: $[\alpha]_D^{22}$ –44.1 (c, 1 in 6*M* HCl)

>>**Variant:** (2*S*,3*R*)-form
Synonym(s): L-*threo*-form. Alloisoleucine

CAS Registry Number: 1509-34-8
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%
Melting Point: Mp 278 dec.°
Optical Rotation: $[\alpha]_D^{25}$ +15.7 (c, 2 in H_2O). $[\alpha]_D^{25}$ +34.9 (c, 4 in 4*M* HCl). $[\alpha]_D$ +40.5 (c, 1 in 5*M* HCl)
pKa Value: pK_{a1} 2.32; pK_{a2} 9.76 (25°)

Fluka: 5703
Sigma: I8754

>>**Derivative:** Me ester

CAS Registry Number: 42271-58-9
Molecular Formula: $C_7H_{15}NO_2$
Molecular Weight: 145.201
Percentage Composition: C 57.90%; H 10.41%; N 9.65%; O 22.04%
Physical Description: Oil

>>**Derivative:** Et ester

CAS Registry Number: 44975-82-8
Molecular Formula: $C_8H_{17}NO_2$
Molecular Weight: 159.228
Accurate Mass: 159.125929
Percentage Composition: C 60.35%; H 10.76%; N 8.80%; O 20.10%
Melting Point: Mp 89-90° (as hydrochloride)
Optical Rotation: $[\alpha]_D^{25}$ +15 (c, 1 in H_2O)

>>**Derivative:** Amide; hydrochloride

CAS Registry Number: 63328-67-6
Melting Point: Mp 240-241 dec.°
Optical Rotation: $[\alpha]_D^{25}$ +32 (c, 1 in H_2O)

>>**Derivative:** *N*-Formyl

Melting Point: Mp 126° (123°)
Optical Rotation: [α] +27.9 (c, 2 in EtOH)