



>>Derivative: *N*-Ac

CAS Registry Number: 20257-17-4

Melting Point: Mp 155-156°

Optical Rotation: $[\alpha]_D^{25} -5.3$ (c, 2 in H₂O). $[\alpha]_D +21.5$ (c, 2 in EtOH)

>>Derivative: *N*-Benzenesulfonyl

Melting Point: Mp 147-148°

Optical Rotation: $[\alpha]_D^{20} +30.7$ (EtOH)

>>Variant: (2*S*,3*S*)-form

Synonym(s): L-*erythro*-form. L-Isoleucine

CAS Registry Number: 73-32-5

Molecular Formula: C₆H₁₃NO₂

Molecular Weight: 131.174

Accurate Mass: 131.094629

Percentage Composition: C 54.94%; H 9.99%; N 10.68%; O 24.39%

Biological Source: Found in hydrolysates of proteins and peptides

Use/Importance: Dietary supplement, nutrient

Physical Description: Cryst. (EtOH aq.)

Melting Point: Mp 285-286 dec.°

Optical Rotation: $[\alpha]_D +16.3$ (H₂O). $[\alpha]_D +51.8$ (5*M* HCl)

Solubility: Mod. sol. H₂O (4.12 g/100 g at 25°)

pKa Value: p*K*_{a1} 2.36; p*K*_{a2} 9.68 (NH₂)

Other Data: Isoelectric point 6.02. Bitter taste

Aldrich: 15171-8

Fluka: 58880

Sigma: I2752

>>Derivative: Me ester

CAS Registry Number: 2577-46-0

Molecular Formula: C₇H₁₅NO₂

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 98-100° (as hydrochloride)

Optical Rotation: $[\alpha]_D^{21} +26.6$ (c, 2 in H₂O)