



>>Derivative: *N*-Ac

**CAS Registry Number:** 20257-17-4

**Melting Point:** Mp 155-156°

**Optical Rotation:**  $[\alpha]_D^{25} -5.3$  (c, 2 in H<sub>2</sub>O).  $[\alpha]_D +21.5$  (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:** C<sub>6</sub>H<sub>13</sub>NO<sub>2</sub>

**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:**  $[\alpha]_D +16.3$  (H<sub>2</sub>O).  $[\alpha]_D +51.8$  (5*M* HCl)

**Solubility:** Mod. sol. H<sub>2</sub>O (4.12 g/100 g at 25°)

**pKa Value:** p*K*<sub>a1</sub> 2.36; p*K*<sub>a2</sub> 9.68 (NH<sub>2</sub>)

**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:** C<sub>7</sub>H<sub>15</sub>NO<sub>2</sub>

**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 H<sub>2</sub>O)