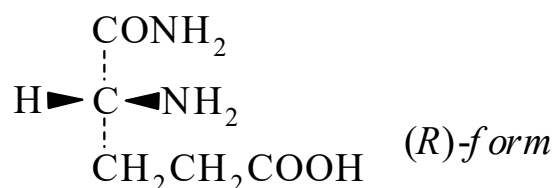




>>Entry Name: Isoglutamine

Synonym(s): 4,5-Diamino-5-oxopentanoic acid, 9Cl. 4-Aminoglutaramic acid. Glutamic acid 1-monoamide



CAS Registry Number: 328-48-3

Molecular Formula: C₅H₁₀N₂O₃

Molecular Weight: 146.146

Accurate Mass: 146.069143

Percentage Composition: C 41.09%; H 6.90%; N 19.17%; O 32.84%

>>Variant: (R)-form

Synonym(s): D-form

CAS Registry Number: 19522-40-8

Molecular Formula: C₅H₁₀N₂O₃

Molecular Weight: 146.146

Accurate Mass: 146.069143

Percentage Composition: C 41.09%; H 6.90%; N 19.17%; O 32.84%

Biological Source: Present in the peptides of the cell walls of *Streptococcus aureus*, *Mycobacterium rosens* and *Streptococcus pyogenes*

Optical Rotation: $[\alpha]_{\text{D}}^{25} -20.6$ (c, 0.96 in H₂O)

>>Derivative: Hydrobromide

Physical Description: Cryst. (H₂O)

Melting Point: Mp 215-216°

Optical Rotation: $[\alpha]_{\text{D}}^{25} -18$ (c, 5.98 in H₂O)

>>Derivative: N-Benzyloxycarbonyl

Physical Description: Cryst. (H₂O or MeOH)

Melting Point: Mp 175-176°

Optical Rotation: $[\alpha]_{\text{D}}^{20} +5.9$ (c, 2 in MeOH)

>>Variant: (S)-form

Synonym(s): L-form

CAS Registry Number: 636-65-7

Molecular Formula: C₅H₁₀N₂O₃

Molecular Weight: 146.146

Accurate Mass: 146.069143

Percentage Composition: C 41.09%; H 6.90%; N 19.17%; O 32.84%

Biological Source: A metab. of 2-Phthalimidoglutarimide [BGX44-Z](#)

Physical Description: Cryst. (Me₂CO)

Melting Point: Mp 186° (181° dec.)

Optical Rotation: $[\alpha]_{\text{D}}^{21} +20.5$ (c, 6.1 in H₂O)

pKa Value: pK_{a2} 7.88 (25°)

Sigma: I8884

>>Derivative: Hydrobromide

CAS Registry Number: 63648-75-9

Physical Description: Cryst. (H₂O)

Melting Point: Mp 216-217°

Optical Rotation: $[\alpha]_{\text{D}}^{24} +17.3$ (c, 6.2 in H₂O)

>>Derivative: N-Benzyloxycarbonyl

Physical Description: Cryst. (Me₂CO/petrol or H₂O)

Melting Point: Mp 172-173° (168-169°)

>>Derivative: 4-Nitroanilide