

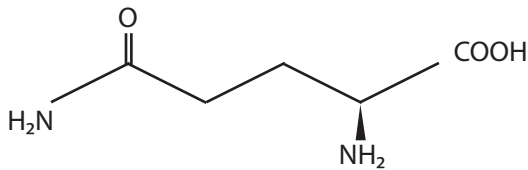
L-Alanyl-L-Glutamine

L-Alanyl-L-Glutamine is an essential amino acid required by virtually all mammalian and insect cells grown in culture. Once deaminated, it is used as an energy source, incorporated into protein, and used in nucleic acid metabolism. Undergoing spontaneous degradation, the breakdown of the amino acid results in the formation of pyrrolidone carbonic acid and potentially harmful ammonia. In addition, exposure to warm temperatures increases this intramolecular cyclization reaction.

L-Glutamine

Storage: -5°C to -20°C
Shipping: -5°C to -20°C

Formula: C₅H₁₀N₂O₃
Molecular Weight: 146.1 g/mol
Code: L-Gln

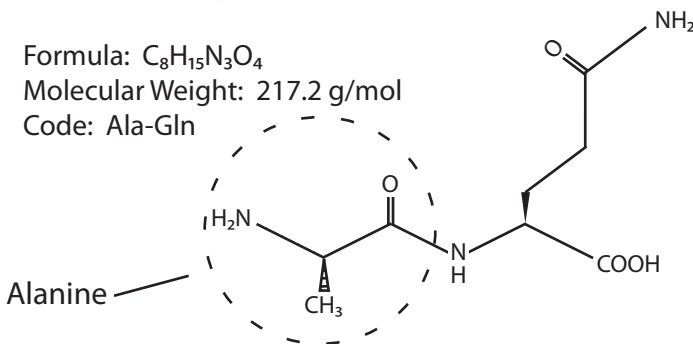


A dipeptide derivative of L-glutamine, L-alanyl-L-Glutamine, incorporates L-alanine that protects the unstable alpha amino acid group. Aminopeptidases within the cells cleave the dipeptide, gradually releasing both L-glutamine and L-alanine for use by the cell. Extremely stable, the dipeptide withstands autoclaving with minimal loss, while L-glutamine is almost completely destroyed when exposed to the same conditions.

L-Alanyl-L-Glutamine

Storage: 2°C to 30°C
Shipping: 15°C to 30°C

Formula: C₈H₁₅N₃O₄
Molecular Weight: 217.2 g/mol
Code: Ala-Gln



Supplementation Table for L-Glutamine and L-Alanyl-L-Glutamine to L-Glutamine-Deficient Culture Media

| | |
|---------------|-------------|
| AMEM | 292 mg/L |
| BME | 292 mg/L |
| DMEM | 584 mg/L |
| DMEM/F-12 | 365.10 mg/L |
| EMEM | 292 mg/L |
| Iscove's DMEM | 584 mg/L |
| M199 | 100 mg/L |
| RPMI 1640 | 292 mg/L |

| Product | Catalog No. | Size |
|--|-------------------------------------|------------------------------------|
| L-Alanyl-L-Glutamine (Dipeptide L-glutamine), Liquid 200 mM Solution | 25-015-CI | 1 x 100 mL |
| L-Glutamine, Liquid 200 mM Solution (29.23 mg/mL) | 25-005-CI 25-005-CV | 6 x 500 mL 6 x 1 L |
| L-Glutamine, Powder MW 146.15 | 61-030-RM 61-030-RO 61-030-RR | 1 x 100 g 1 x 500 g 1 x 1 kg |