

UltraGlutamine™I and UltraGlutamine™II

Product Code: LSG-1167B and LSG-1168B

Description

- UltraGlutamine™ I: 200 mM Alanyl-L-Glutamine in normal saline, used at equimolar concentrations as L-glutamine with little to no adaptive period
- UltraGlutamine™ II: 200 mM L-Glycyl-L-Glutamine in normal saline, used at equimolar concentrations as L-glutamine, may require an adaptive period
- Both supplied in normal saline at a concentration of 200 mM

UltraGlutamine Supplement is an extremely stable dipeptide form of L-glutamine that avoids accumulation of toxic ammonia produced by spontaneous degradation in the medium. UltraGlutamine Supplement can be autoclaved (121°C, 20 minutes) with no significant breakdown. It can be substituted for L-glutamine on an equimolar basis for most adherent and suspension cultures.

UltraGlutamine I Supplement is alanyl-L-glutamine. A cellular adaptation period is not required and growth of most cell types is comparable to that obtained with L-glutamine.

UltraGlutamine II Supplement is glycyl-L-glutamine and is recommended for hybridoma applications. Growth may be somewhat slower, but viability and antibody production are enhanced. Widely variable growth performance can be expected for cells other than hybridomas, depending on species and cell type.

Applications that may benefit from UltraGlutamine Supplements are:

- Ammonia sensitive systems (bioreactors)
- Long term toxicity studies
- Long incubations without feeding (cloning assays)

UltraGlutamine I and II Supplements are cleaved into L-glutamine and the respectively associated amino acid by aminopeptidases present in the cell and in serum. A period of adaption may be required for use of UltraGlutamine Supplements in serum-free applications.

Advantages:

- No degradation of L-glutamine during storage or incubation
- No Ammonia build up
- Controlled glutamine delivery
- No addition of L-glutamine just prior to use
- MAb production in murine hybridomas is enhanced (with UltraGlutamine II Supplement)

Formulation

| Description | CAS # | Chemical Formula | Concentration | | Molarity | |
|------------------|------------|------------------|---------------|-----------|----------|---------|
| | | | g/L | mg/L | M | mM |
| NaCl | 7647-14-5 | NaCl | 8.500 | 8.500E+03 | 0.145 | 145.448 |
| Ultraglutamine I | 39537-23-0 | C8H15N3O4 | 43.444 | 4.344E+04 | 0.200 | 200.000 |

Presentation

| Product Code | Description | Volume |
|--------------|--------------------|--------|
| LSG-1167B | UltraGlutamine™ I | 100mL |
| LSG-1168B | UltraGlutamine™ II | 100mL |

Storage

Storage temp: +2-8°C in the dark

For Research use only. Not approved for human or veterinary use, for application to humans or animals, or for use in clinical or *in vitro* procedures.

Support

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