

## UltraGlutamine™ Supplement 200 mM (100X)

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™ I 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 adaption 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 include:

- 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™ I Supplement 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)

### Formula

Component	BE17-605/U1	BE04-684E
L-Alanyl-L-Glutamine (UltraGlutamine™ I Supplement)	43,444 mg/L	
L-Glycyl-L-Glutamine H <sub>2</sub> O (UltraGlutamine II Supplement)		44,240 mg/L
NaCl	8,500 mg/L	8,500 mg/L

### Usage

EMEM	2 mM concentration	10 mL/L
DMEM	4 mM concentration	20 mL/L

IMDM	4 mM concentration	20 mL/L
RPMI	2.1 mM concentration	10.3 mL/L

## Specifications

Cat. No.	pH	Osmolality (mOsm)	Cell growth promotion	Endotoxin (EU/ml)	Sterility
BE17-605/U1	5.58-6.78	423-499	Pass	<1.0	Neg.
BE04-684	5.58-6.78	423-499	Pass	<0.05	Neg.

## Storage

15°C - 30°C

## Ordering Information

Cat. No.	Description	Size
BE17-605E/U1	UltraGlutamine™ I Supplement 200 mM (100X)	100 mL
BE04-684E	UltraGlutamine™ II Supplement 200 mM (100X)	100 mL

## Product Use Statement

**THESE PRODUCTS ARE 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* diagnostic procedures.

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