

Glutamine stable 100X, 200mM

CAT N° : X0551

Theoretical pH : 5.5 – 7.0

Osmolality : As reported

Colour : Colourless

Storage conditions : Frozen / Freeze again after using at –20°C

Shelf life : 24 month

Sterility tests :

- Bacteria in aerobic and anaerobic conditions
- Fungi and yeasts

Endotoxin : <10 EU/ml

Cell growth test : Medium tested for the ability to support L929 cell growth and SP2/O-Ag14 cell growth.

Composition : L-Alanyl-L-Glutamine 37.6g/l

Recommended use :

- Respect storage conditions of the product
- Do not use the product after its expiry date
- Store product in an area protected from light
- Manipulate the product in aseptic conditions (e.g. : under laminar air flow)
- Wear clothes adapted to the manipulation of the product to avoid contamination (e.g. : gloves, mask, hygiene cap, overall...)
- In order to preserve all product qualities, it is recommended to thaw out the flask, to aliquote, then to re-freeze the produced flasks rather than to thaw out and re-freeze the flask at each use.
- It is recommended to use the product immediately after its thaw out.

The product is intended to be used in vitro, in laboratory only. Do not use it in therapy, human or veterinary applications.

Application :

L-Glutamine is an essential amino acid required by all mammalian and insect cells for their culture. It is a crucial component of many cell culture media and serves as a major energy source for cells in culture.

Glutamine stable (L-Alanyl-L-Glutamine), dipeptide derivative of L-Glutamine prevents the intramolecular cyclization reaction associated with solutions of L-Glutamine.

The dipeptide derivative is metabolized within the cells to yield L-Glutamine and L-Alanine. This results in more consistent delivery of L-Glutamine to cells and avoid toxic build-up of ammonia in the cells. Glutamine stable is therefore especially dedicated for ammonia-sensitive cell lines.

Glutamine stable allows the formulation of cell culture media containing L-Glutamine that may be stored at 4°C for extended periods. Solutions containing these derivatives can be even autoclaved without appreciable degradation of the product (loss of the product < 5% after 30 minutes at 121°C).

Utilisation :

1. Remove product from the freezer and allow it to sit at room temperature for 30 minutes.
2. Thaw the product completely in a 37°C water bath. Agitate every 15-20 minutes to avoid concentration gradients. Remove Glutamine stable from water bath as soon as it is completely thawed.
3. Supplement cell culture medium with appropriate volume to achieve desired concentration (Use the same concentration of Glutamine stable in your medium as normally required for regular L-Glutamine).

Indications of deterioration :

Medium should be clear of particulates and flocculent material after warming to 37°C.

Do not use if the medium is cloudy or contains precipitate.

Other evidence of deterioration may include degradation of physical or performance characteristics.