

## Glutamine stable 100X, 200mM

**CAT N°:** X0551

**Theoretical pH:** 5.0 – 7.0

**Osmolality:** 200 ± 30 mOsm/kg

**Colour:** Colourless

**Storage conditions:** Room Temperature

**Shelf life:** 24 months

**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 43.444g/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...)

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:**

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.

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

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

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