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Iscove's Modified Dulbecco's Medium w/ Stable Glutamine w/ 25mM Hepes

CAT N° : SLIM-537-500

Theoretical pH : 7.2 ± 0.3

Osmolality : 290 mOsm/kg $\pm 10 \%$

Colour : Red, clear solution

Storage conditions : +2°C to +8°C. Protect from light.

Shelf life : 24 months

Sterility tests :

- Bacteria in aerobic and anaerobic conditions
- Fungi and yeasts

Endotoxin : < 1 EU/ml

Cell growth test :

Medium tested for the ability to support SP2/0-Ag14 cell growth.

Composition : Displayed on website and in catalogue; also available on request.

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 (not necessary for saline solutions).
- 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 :

In 1976, Guilbert and Iscove demonstrated that precursor cells of erythrocytes and macrophages could be cultured in a reduced-serum medium supplemented with albumin, transferrin, lecithin, and selenium.

Iscove's medium is a modification of Dulbecco's Modified Eagle's Medium (DMEM) containing selenium, additional amino acids and vitamins, sodium pyruvate, HEPES buffer, and potassium nitrate instead of ferric nitrate .

Further studies demonstrated that Iscove's Medium would support murine B lymphocytes, hemopoietic tissue from bone marrow, B cells stimulated with lipopolysaccharide, T lymphocytes, and a variety of hybrid cells.

The stable Glutamine prevents the intramolecular cyclization reaction associated with solutions of L-Glutamine. This derivative is therefore stable in solution and allows the formulation of cell culture media containing L-Glutamine that may be stored at 4°C for extended periods. The dipeptide is metabolized within the cells to yield L-Glutamine plus a second amino acid.

Uses :

Supplements, such as antibiotics, should be added as sterile supplements to the medium.

Storage conditions and shelf-life of supplemented product will be affected by the nature of the supplements.