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### DMEM High Glucose w/ stable Glutamine w/ 25mM Hepes w/o Sodium Pyruvate

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Product code :  
LM-D1113

**Theoretical pH** :  $7.2 \pm 0.3$

**Osmolality** : 296 mOsm/kg  $\pm 10 \%$

**Colour** : red, clear solution

**Storage conditions** : +2°C to +8°C

**Shelf life** : 24 months

**Sterility tests** :

- Bacteria in aerobic and anaerobic conditions
- Fungi and yeasts

**Endotoxin** : < 1 EU/ml

**Composition** : available on request.

**Cell growth test** :

Medium tested for the ability to support cell growth with L929 line.

**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 :**

Lots of modifications of Eagle's medium have been developed since the creation of the first formulation. The most used Eagle's medium is the Dulbecco's Modified Eagle's Medium (DMEM).

It is a modification of Basal Medium Eagle (BME) that contains a concentration more important of amino acids and vitamins and also supplementary components. The original formulation contained 1000mg/l of glucose and was used to culture embryonic mouse cells. The used of 4500mg/l of glucose in the medium show an optimal cell growth for some cell lines.

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 +2°C to +8°C for extended periods. The dipeptide is metabolized within the cells to yield L-Glutamine plus a second amino acid.

## **Utilisation :**

Supplements, such as antibiotics, should be added as sterile supplements to the medium. Storage conditions and shelf-life of supplemented products will be affected by the nature of the supplements.

Serum should not be re-filtered before or after being added to sterile medium because growth promoting capacity may be reduced upon re-filtration.

## **Indications of deterioration :**

Medium should be clear and free of particulate and flocculent material. Do not use if medium is cloudy or contains precipitate.

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