

Ref : FT.L0498an Version date : 04/12/13

# **RPMI 1640**

## w/ Stable Glutamine

CAT N° : SLR-561-500

**Theoretical pH** :  $7.3 \pm 0.3$ 

**Osmolality :** 278 mOsm/kg  $\pm$  10 %

Colour : Clear orange solution

**Storage conditions :**  $+2^{\circ}$ C to  $+8^{\circ}$ C in the dark

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; 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.

### **Applications :**

RPMI 1640 medium has a broad spectrum of mammalian and hybridoma cell applications. It was developed by Moore and his co-workers at Roswell Park Memorial Institute in 1966 for the growth of human leukemia cells in monolayer or suspension cultures. It is typically supplemented with serum or serum substitutes.

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  $+2^{\circ}$ C to  $+8^{\circ}$ 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 product will be affected by the nature of the supplements.

#### Signs 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.