

## HT Medium supplement 50X, Liquid

w/ 680.5 mg/litre Hypoxanthine and 193.8 mg/litre Thymidine in Phosphate Buffered Saline

**Sterile filtered**

**Cell Culture Tested**

**Product Code: TCL073**

### Product description:

Monoclonal antibodies are produced by hybridoma technology in which a non-secreting myeloma cell line is fused with an antibody-producing B-lymphocyte. After fusion, the hybrids are most frequently selected with the HAT system consisting of Hypoxanthine, Aminopterin and Thymidine. The two key functions of the HAT system are:

1. to inhibit growth of unfused cells
2. to selectively allow growth of fused or hybrid cells

The specific action of aminopterin present in the HAT system is to inhibit the *de novo* DNA synthesis. Hence, it needs to be eliminated once the hybrids are selected and isolated. Aminopterin is diluted by several passages in hypoxanthine-thymidine (HT) supplemented medium for about 2-3 weeks. Once the *de novo* nucleoside-synthesis pathway has been reinstated, HT supplementation can be discontinued.

TCL073 is a sterile filtered, cell culture tested 50X HT medium supplement containing 680.5 mg/litre Hypoxanthine and 193.8 mg/litre Thymidine in Phosphate Buffered Saline.

### Directions for use:

1. Aseptically transfer 10 ml of the 50X HT medium supplement to 500ml of sterile medium.

2. Tightly cap the media bottle and mix gently to ensure proper mixing.

Note: Do not mix vigorously as it may lead to formation of foam.

3. The final concentrations of hypoxanthine and thymidine in 500ml media will be 100mM and 16mM, respectively.

### Quality Control:

#### Appearance

Colorless, clear solution

#### pH

9.00 to 10.50

#### Cell Culture Test

Passes

#### Sterility

No bacterial or fungal growth is observed after 14 days of incubation, as per USP specifications

#### Endotoxin Content

NMT 1EU/ml

### Storage and Shelf Life:

Store the product at -20°C. After dilution with medium, store at 2-8°C.

Use before expiry date given on the product label.

#### Disclaimer:

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.