

mHTF

Reference# 15226 (100mL), 15227 (500mL)

For laboratory use only; other uses must be qualified by the end user

INTENDED USE

mHTF Medium is for *in vitro* assisted reproduction technology procedures involving the manipulation of gametes and embryos outside a CO₂ incubator. This medium is a modification of HEPES-buffered Human Tubal Fluid (HTF) (Fertil Steril 41:202, 1984; 44:493, 1985). Modifications include low-phosphate and the addition of EDTA as an anti-oxidant and alanyl-glutamine as a stable auxiliary energy and fixed nitrogen source, as well as inclusion of specific non-essential amino acids and calcium lactate.

DESCRIPTION

mHTF is an aqueous, isotonic, complex mixture of organic and inorganic salts and simple carbohydrates, at neutral pH intended for *in vitro* mammalian cell culture. Contains 0.010 mg/mL Gentamicin and 0.003 mg/mL phenol red as a pH indicator.

mHTF uses a buffering system composed of 21 mM HEPES and 4 mM Sodium bicarbonate. This buffering system provides optimum pH maintenance over the physiologic range (7.2 to 7.6) and does not require the use of a CO₂ incubator.

COMPONENTS

Sodium Chloride	HEPES	Alanyl-Glutamine
Potassium Chloride	Glucose	Non-essential Amino Acids
Magnesium Sulfate	Sodium Pyruvate	Gentamicin
Potassium Phosphate, Anhydrous	Calcium Lactate, Pentahydrate	Phenol Red
Sodium Bicarbonate	EDTA	

STORAGE INSTRUCTIONS AND STABILITY

Store mHTF at 2° to 8°C upon receipt. Warm media to 37°C prior to use. Do not freeze or expose to temperatures greater than 39°C. Media should be tightly capped when used in a CO₂ incubator to avoid pH levels of 7 or less. The expiration date is shown on the box and bottle labels. The product will remain stable for multiple uses through its expiration date provided proper sterile technique is used.

DIRECTIONS FOR USE

Each laboratory should make its own determination of suitability for use in each particular procedure. To be used by appropriately trained personnel. This is the preferred medium for procedures performed in an atmosphere of air not involving the use of a CO₂ incubator. Such procedures include oocyte recovery, gamete washing, micromanipulation, embryo transfer and cryopreservation. mHTF can be supplemented with an exogenous protein source.

PRODUCT SPECIFICATIONS

A complete Certificate of Analysis is provided with every lot of mHTF.

PRECAUTIONS AND WARNINGS

Do not use any bottle of medium showing evidence of particulate matter, cloudiness, or that is not rose colored. To avoid problems with contamination, practice sterile transfer technique and discard minimal amounts of excess medium remaining in the bottle.

RELATED PRODUCTS

Vitrolife has a full line of products for the Reproductive Medical Specialist. Please visit our website or call for specific information. For technical questions, or to reach our Customer Service Department: please call 800-995-8081 or 858-824-0888.

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