

Cell Culture

# HTF medium / m-HTF medium

- No animal derivative is contained.
- **HTF medium**  
This medium is suitable to use in multi-gas incubator. For washing sperm, insemination and culture of early embryos.
- **m-HTF medium**  
This medium is suitable to use in ambient atmosphere. For handling and manipulation of oocytes/embryos.



Enlargement

Order Number	Code	Details	Contents
93441	HTFS-100	with Human Serum Albumin	100mL
93443	HTFMS-100		

## COMPONENTS

### HTF medium

Calcium Chloride / Gentamicin / Glucose / Magnesium Sulfate / Potassium Chloride / Potassium Phosphate / Sodium Bicarbonate / Sodium Chloride / Sodium Lactate / Sodium Pyruvate

### m-HTF medium

Calcium Chloride / Gentamicin / Glucose / HEPES / Magnesium Sulfate / Potassium Chloride / Potassium Phosphate / Sodium Bicarbonate / Sodium Chloride / Sodium Lactate / Sodium Pyruvate

## QUALITY CONTROL

Sterile Filtration / Sterility Test / pH 7.2-7.6 / Osmolality 270-295mOsm/kg / Endotoxin <0.25EU/mL / Mouse Embryo Assay ≥80% / Mouse Oocyte Survival Test ≥80%

Storage condition: 2-8°C / Shelf life: HTF= 90 days, m-HTF=180days

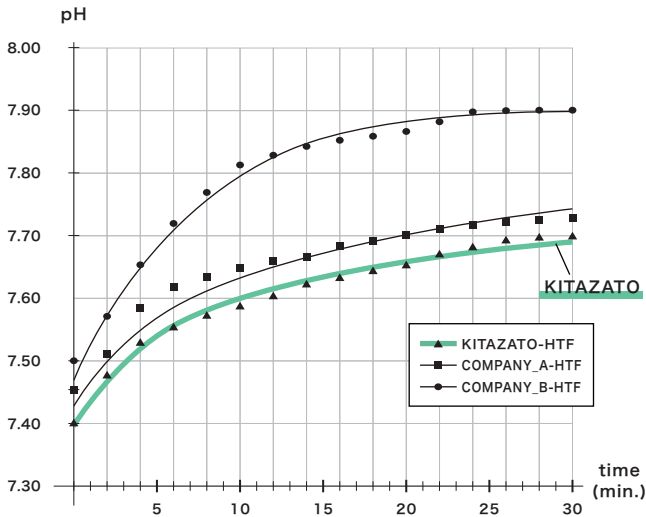
- Specification may change without pre-notice for purpose of product improvement.
- Kitazato Logo is trademarked.

# TEST RESULTS

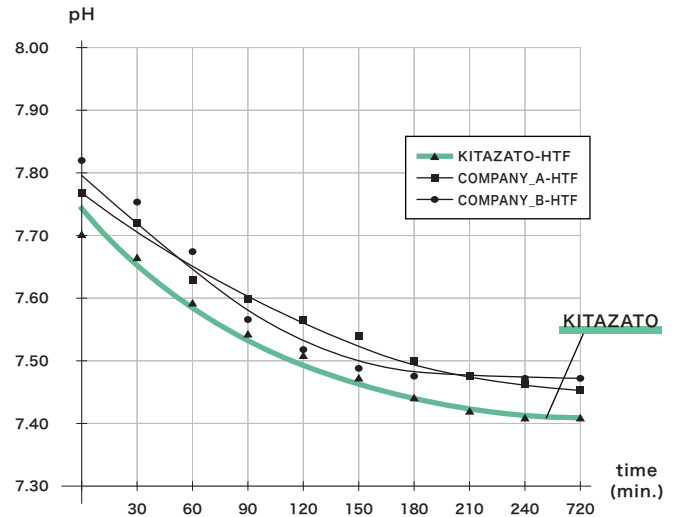
## ● Maintain stable pH value

Stable pH value in medium is a very important factor for oocytes and embryos. Kitazato Corporation Co., Ltd has improved the composition of HTF medium. In the result, the pH value rise was minimized when the medium was exposed in ambient atmosphere. On the other hand, the value quickly returned to pH7.4 when the medium was transferred back into a multi-gas incubator.

Comparison of pH rise under the ambient atmosphere. (30min.)



Comparison of pH change over the time in gas incubation



## ● Mouse embryo assay (MEA)

### HTF

Blastocyst formation rate was 94.8%, when 2-Cell mouse embryos (ICR) were cultured in KITAZATO HTF medium for 72 hours. Slightly better result was obtained with KITAZATO HTF medium compared with another brand.

### m-HTF

Blastocyst formation rate was 91.2%, when 2-Cell mouse embryos were processed in the m-HTF medium for 30 minutes and then cultured with KSOM medium for 72 hours. Slightly better result was obtained with KITAZATO HTF medium compared to another brand.

