



CAUTION

U.S. federal law restricts this device to sale by or on the order of a physician.

DESCRIPTION

The VitaVitro® Humdish is a purpose-designed sterile plastic dish designed for mammalian preimplantation embryo culture, especially for - but not restricted to - dry incubators or those with inconsistent, uncontrolled humidity levels.

Unique parameters of the VitaVitro Humdish ensure > 95-98% humidity between Day 0 (or Day 1) to Day 7 (Day 0: day of fertilisation or ICSI) in both dry or (nominally or definitely) humid incubators.

The fact that the dish itself provides humidity ensures the highest consistency, preventing any increase of osmolality during the whole culture period.

Moreover, a large amount of water stored in the outer cycle also

prevents temperature fluctuation during door opening or possible (but not suggested) temporary dish removal from the incubator for visual control of embryos.

Accordingly, the VitaVitro® Humdish provides optimal conditions for uninterrupted culture in a single medium for single-cell embryos to develop to the blastocyst stage.

The VitaVitro® Humdish can be used in any commercially available incubator that can host standard 60 mm diameter dishes, including dry or "humid" benchtop toploaders, box-type incubators or various new combinations of these.

WARNING

- 1) The user should read and understand the Instructions for Use, Warning; and be trained in the correct procedure before using the VitaVitro® Humdish.
- 2) Do not use the product if the packaging appears damaged or broken.

- 3) For single use only.
- 4) Do not use it after the expiry date.
- 5) To avoid problems with contamination, practice aseptic techniques.
- 6) Discard the dish according to standard clinical practice for hazardous medical waste when the procedure is finished.

STORAGE AND SHELF LIFE

Store at room temperature.

The shelf life is two years from the time of manufacturing.

COMPOSITION

The VitaVitro® Humdish is constructed of polystyrene and is non-pyrogenic. It has passed USP Class VI testing and is sterilised by gamma irradiation.

QUALITY

Sterility tested (Ph.Eur, USP) mL

LAL Endotoxin < 25EU/mL

1-cell Mouse Embryo Assay (% blastocysts at 96h of culture) ≥80%

INSTRUCTIONS FOR USE

The pack must be opened in a sterile environment. The dishes should remain covered with the lids until they are loaded with the culture medium and oil.

To avoid condensation on the lid, we suggest warming all media, oil, water and the dish itself to 37°C before preparation. Perform all manipulations on 37°C heated stages.

1) Mark the dish for embryo and patient identification

Identification can be placed on the lid or the bottom of the VitaVidro® Humdish.

2) Droplets preparation

According to the actual need, make several droplets in the inner compartment of the petri dish. We suggest any volume between 5 to 20 µL. Cover the drops with 3 mL mineral oil.

To avoid any possible increase of osmolality during drop preparation, you may consider using the drop-in method. Immediately after covering

drops with oil, remove 80-90% of the drops and replace them with new medium.

3) Add water

Add 12 mL ultra-pure sterile water to the outer ring. Avoid splashing water into the inner ring.

4) Equilibration

Transfer the VitaVidro® Humdish into an incubator with 37°C, (preferably) 5% CO₂, 5% O₂, and 90% N₂ atmosphere, and (preferably, to avoid any evaporation before use) maximum humidity. Incubate overnight.*

5) Transfer embryos into the VitaVidro® Humdish

After washing twice in a culture drop, transfer embryos to a fresh drop and incubate them to the required stage. The Humdish provides optimal conditions for single medium-uninterrupted culture to the blastocyst stage.

**incubation temperature and culture period may vary between species*

FOR MORE INFORMATION

Regarding the humidity-osmolality problem and the benefits of

VitaVidro® Humdish:

Chen WB, Machaty Z, Marconetto A, Parmegiani L, Vajta G.

A Simple and Efficient Solution to Eliminate Evaporation in Mammalian Embryo Cultures.

Cell Reprogram. 2021 Oct;23(5):316-318. doi: 10.1089/cell.2021.0061.

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FOR TECHNICAL SUPPORT

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