FertiCult G3 medium

CELL CULTURE MEDIUM FOR IN VITRO CULTURE OF HUMAN EMBRYOS, FROM 48 HOURS TILL 96 HOURS IN CULTURE

FertiCult G3 medium sterilized by aseptic filling STERILE A

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GENERAL INFORMATION

FertiCult G3 medium is a ready to use medium for the *in vitro* culture of mammalian embryos. It is designed for sequential culture with FertiCult IVF medium from 48 hours till 96 hours culture.

The medium is complete and does not require further additives. If preferred patient serum can be added.

FertiCult G3 medium is suitable for microdroplets under oil or equally suited to culture in Falcon 3037 organ culture dishes (also 4-well Nunc culture dishes).

As with all IVF media, G3 medium has to be **pre-incubated in the incubator for 24 hours before use** (with lid opened).

MATERIAL INCLUDED WITH THE KIT

Productcode: G3-20

9 x 20mL FertiCult G3 medium

Productcode: G3-50

5 x 50mL FertiCult G3 medium

Productcode: G3-100

3 x 100mL FertiCult G3 medium

MATERIAL NOT INCLUDED WITH THE KIT

- Incubator
- Petri dishes
- Mineral oil
- Laminar flow
- Microscope
- Test tubes

PRODUCT SPECIFICATIONS AND QUALITY CONTROL

FertiCult G3 medium is manufactured according to these specifications:

- pH: 7.20 - 7.40
- Osmolality: 275 - 285 mOsm/kg
- Endotoxin: < 0.25 EU/mL
- Sterility: Sterile
- Mouse-embryo test: > 70% blastocysts after 96 hours in culture
- Use of Ph Eur or USP grade products if applicable

INSTRUCTIONS FOR USE (SUGGESTED PROCEDURES)

PREPARATIONS FOR USE OF MICRODROPLETS

For microdroplets, between 100-250µL of FertiCult G3 medium may be dispensed around the culture dish, up to 6 per 60mm dish.

The dish is then filled with 5mL of pre-washed and pre-equilibrated light mineral oil (nontoxic and preferably embryo tested, e.g. FertiCult Mineral Oil).

Each dish is placed in the incubator (usually non-humidified) to equilibrate overnight at 37°C and under an atmosphere of 5% CO_2 in air.

PREPARATIONS FOR USE IN OPEN SYSTEMS

In open systems such as with the Falcon or Nunc dishes, about 1mL of medium is placed in each well.

A further 3mL is placed in the reservoir surrounding the wells. This helps to maintain humidity as well as providing medium with which to wash the embryos.

Each dish is placed in the incubator to equilibrate overnight at 37°C and under an atmosphere of 5% $C0_2$ in air.

As with the microdroplets method described above, **equilibration overnight is highly recommended**.

In the open system, paraffin oil is not necessary, but sometimes a 1mL layer of mineral oil may be added over the medium in the inner well. When using such an open system the incubator must be humidified.

CULTURE

After 48 hours culture, embryos are usually ready for embryo transfer. However, if further culture is intended, use FertiCult G3 medium.

Place the embryos into fresh dishes containing fresh FertiCult G3 medium (see above).

It is important to prepare fresh dishes for this purpose and they must be equilibrated by overnight pre-incubation and pre-equilibration in the incubator. After a further 24 hours culture the embryos will then be ready for transfer (between 8 and 16 cells at this stage).

STORAGE AND CONSERVATION

FertiCult G3 medium should be stored between 2-8°C.

Keep from light.

WARNING AND PRECAUTION

All human, organic material should be considered potentially infectious.

Handle all specimens as if capable of transmitting HIV or hepatitis. Always wear protective clothing when handling specimens.

FertiCult G3 medium does not contain antibiotics, always work under strict hygienic conditions (laminar flow) to avoid contamination, or add your own antibiotics (penicillin) at about 100 units per mL.

Don't use FertiCult G3 medium if cloudy.

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