

## MRC5 human diploid cells cryovial

### Human fetal lung cells

#### PRESENTATION

Each cryovial contains 10 million MRC5 human diploid cells ( $10 \times 10^6$  minimum viable cells per cryovial) in a cryopreservation media. They have reached the 34th doubling level and are at passage number 23.

#### SHIPMENT

MRC5 cells are shipped in dry ice package. The shipping time is 7 days after order. Any formula subscription can be studied.

**NOTE:** Handle dry ice with caution (of risk burns and asphyxiation).

#### ON RECEIPT

Upon receipt, the cryovials should preferably be kept in liquid nitrogen for a long term storage.

**NOTE:** for storage of less than 3 months, cryovials can be kept at  $-80^{\circ}\text{C}$

**NOTE:** upon receipt, report any package containing no more dry ice for its replacement.

#### CULTURE CONDITIONS

Culture medium: BME medium (Basal Medium Eagle) or MEM (Minimal Essential Medium) supplemented calf serum foetal (2-10%), antibiotics and bicarbonate sodium (2.2 g/L) if required.

Incubation: The optimal culture conditions are a temperature of  $37^{\circ}\text{C}$  under 5% enriched  $\text{CO}_2$  atmosphere.

#### CULTURE :

*Thawing of the cryovial:*

The contents of the vial should be thawed quickly in a water-bath. When there is a small cube of ice, transfer the content of the cryovial in 10 mL of complete culture medium containing 10 % foetal calf serum. Perform a count, determining the total number of cells and their viability. Dilute cells to obtain a cell density for seeding between 2 to  $4 \cdot 10^4$  cells per  $\text{cm}^2$ . Centrifugation of the cells is not necessary after thawing to remove traces of cryoprotectant. However, in this case a change of medium is performed after 24 hours. The resulting cell suspension is distributed into bottles. During the culture, it is recommended to use the medium containing 10% foetal calf serum (FCS) to allow the cells to find a rate of normal growth.

Furthermore, for use in tubes, we recommend, for the same reasons, to perform prior flask culture before placing them into the tubes. In standard conditions (medium with 10% FCS) the confluence can be obtained in 5-8 days. The established cell layers can be kept at confluence for several weeks by replacing growth medium (10% FCS) by a medium enriched with 2% serum and regular medium refreshment.

#### USE

MRC5 cells are human foetal diploid cells.

These cells are widely used in the field of virology due to their susceptibility to numerous human viruses in particular for Cytomegalovirus.

#### PRECAUTIONS

This product contains cells of human origin. No known analysis method can totally guarantee the absence of transmissible pathogenic agents. It is therefore recommended that these products be treated as potentially infectious and handled observing the usual safety precautions and unused cells must be eliminated in accordance with good laboratory practice (see Laboratory biosafety manual - WHO - Geneva - latest edition).

#### QUALITY CONTROL

Cells are living organisms and therefore fragile. Their characteristics may be altered during transport, even though they are handled with great care. To ensure product quality on receipt, after thawing a microscopic cell count (after adding a Blue Trypan type vital stain) should be carried out, to determine the viability of the suspension.

#### LITERATURE REFERENCES

- JACOB J.P., JONES C.M., BAILLE J.P. - Characteristics of a human diploid cell designated MRC5. Nature, 1970 - 227 -168 - 170.
- HOLPER J.C. - Characteristics of primary cultures and diploid cells-Technology of production. National Cancer Institute Monograph. 1968 n° 29 p 21-31.
- Mc ATEER J.A., DOUGLAS W.H.J. - Monolayer culture techniques in : JAKOBY W.B. (ed) : Cell culture Methods in Enzymology, 1979, Vol 58, p 132-140, Academic Press.

### TABLE DES SYMBOLES:

Symbol	Signification
	Catalogue Number
	Manufacturer
	Temperature limit
	Batch code
	Date of manufacture

Symbol	Signification
	Expiration date
	Do not reuse
	Biohazards
	Consult instructions for use