ClearLine	Technical data sheet Media Powder	Ref : 509181

Iscove's Modified DMEM

w/ L-Glutamine w/ 25 mM Hepes w/o Phenol Red

Storage conditions: Store dry powder medium at +2°C to +8°C
Store hydrated medium at +2°C to +8°C, protected from light

Shelf life: 36 months

Composition: Displayed on website and in catalogue; also available on request.

pH: 7.0 ± 0.3

Osmolality: 276 mOsm/kg ±10%

Endotoxin: < 1 EU/ml

Recommended use:
- Respect storage conditions of the product
- Do not use the product after its expiry date
- Store the product in a dry area
- Wear clothes adapted to the manipulation of the product to avoid contamination (e.g. : gloves, mask, hygiene cap, overall…)
- Protect the product from any form of humidity
- Use, in one time, after opening, the entire quantity of product of the container, without making a concentrated solution (to avoid the formation of precipitates). If it is not possible, close the container immediately after sampling the quantity of powder required.
- Supplements can be added prior to sterile filtration of the medium or aseptically introduced to sterile medium (respect the final concentration of the media). The nature of the supplements may affect storage conditions and shelf life of the medium.

The product is intended to be used in vitro for research or further manufacturing only and not for use as an Active Pharmaceutical Ingredient or food or animal feed.

Application:
In 1976, Guilbert and Iscove demonstrated that precursor cells of erythrocytes and macrophages could be cultured in a reduced-serum medium supplemented with albumin, transferrin, lecithin, and selenium.
Iscove's medium is a modification of Dulbecco's Modified Eagle's Medium (DME) containing selenium, additional amino acids and vitamins, sodium pyruvate, HEPES buffer, and potassium nitrate instead of ferric nitrate.

Uses:
1) Measure 90% of final required volume of water. Water temperature should be 15-20°C.
2) While gently stirring the water, add slowly the powdered medium (20.717 g/l). Stir until dissolved. Do not heat.

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3) Rinse original package with a small amount of water to remove all traces of powder. Add to solution in step 2.
4) While stirring the solution, adjust the pH of the medium to 0.1 – 0.3 pH units below the desired pH since it may rise during filtration. The use of 1 N HCl or 1 N NaOH is recommended.
5) Add additional water to bring the solution to final volume.
6) Sterilize immediately by filtration using a membrane with a porosity of 0.22 microns.
7) Aseptically dispense medium into sterile container.

Signs of deterioration:
Dry powder medium should be free flowing. Do not use if powder caked. Prepared medium should be cleared of particulates and flocculent material. Do not use if liquid medium is cloudy or contains precipitate. Other evidence of deterioration may include degradation of physical or performance characteristics.

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