Product Instruction

Adherent Cell Low-serum Medium

Product Type: LS902

Product Description

LS902 is a low-serum medium developed by Shanghai BioEngine Sci-Tech Co., Ltd. This medium is suitable for adherent culture for a large range of cell lines, such as Vero, 293, ST, Marc145, PK15. The desired serum would be 3%-5% (v/v).

Product Formula

The intellectual property rights of adherent cell low-serum medium formula are owned by Shanghai BioEngine Sci-Tech Co., Ltd.

Product Ingredient

The medium contains carbohydrates, amino acids, vitamins, metal ions and other nutritional components.

This product does not contain components of animal origin, genetically modified plant origin or raw material with mad cow virus origin.

Product Preservation

- Store in a dark environment at 2-8℃.
- The product is highly hygroscopic, so it should be used immediately after opening. If it is necessary to keep it, it is recommended to use heat sealing, sealing clips or other means to strictly seal the opening. Keep it away from moisture.
- It is not recommended to use beyond the shelf life.

Reconstitution of LS902 powder medium

Reconstitute of adherent cell low-serum medium as Table 1 shows.

Component	Concentration
LS902 powder medium	15.91g/L
sodium hydroxide	0.146 g/L
Sodium bicarbonate	2.13 g/L

Table 1 Preparation of adherent cell low-serum medium

(1) Add water at 100% of final preparation volume into the medium preparation container. Use ultrapure water, water for injection or other cell culture-grade water, and the water temperature should be controlled at 20-30℃.

(2) Turn on the mixing system to stir the water. Avoid air bubbles during stirring.

(3) Add 15.91 g/L of LS902 powder medium. Mix for 20-30 min or until dissolved.

(4) Add 0.146 g/L sodium hydroxide. Mix for 10-20 min. The recommended addition amount of sodium hydroxide is 0.24 g/L.

(5) Add 2.13 g/L sodium bicarbonate, mix for 10-20 min.

(6) Check pH and adjust pH value to 7.0-7.4 with 1 mol/L hydrochloric acid.

(7) Sterile filter into desired container using a 0.22 μm sterile filter.

(8) The prepared medium liquid should be stored in a dark environment at 2-8℃.

(9) Add 3%-5% (v/v) serum to prepare complete growth medium before using. It is recommended to be used in one month.

General culture recommendations

Subculture

- It is recommended to subculture cells that reach 80%-90% confluency.
- Incubate the cells at 37℃ in a suitable incubator with 5% CO_2 in air atmosphere. Use flasks with vent cap.

Cryopreservation

Prepare the desired quantity of cells, harvesting in mid-log phase of growth with good condition. The recommended cryopreservation density is 5-6×10^6 cells/ml/vial. And the cryopreservation medium is prepared as 90% (v/v) complete growth medium supplemented with 10% (v/v) DMSO. Centrifuge cells at 190× g for 5 min and discard the supernatant. Resuspend

pellets with cryopreservation medium and dispense aliquots of this suspension into cryovials with 1 ml/vial. Achieve cryopreservation in an automated controlled rate freezing container and keep it in -80℃ freezer overnight. Transfer frozen cells to liquid nitrogen for long-term storage.

Recovery

Thaw the vial by gentle agitation in a 37°C water bath. This process should be rapid (approximately 2 minutes). Remove the vial from the water bath as soon as the contents are thawed. All the operations from this point on should be carried out under strict aseptic conditions. Transfer the vial contents to a centrifuge tube with 10 ml of growth medium and centrifuge cells at 190× g for 5 min to wash away DMSO. Discard the supernatant and resuspend the pellets with 15-20 ml of complete growth medium into a 75 cm^2 T-flask.