

Stem Cell 1

Version 1.0

Stem Cell 1 is a cell culture medium designed for expanding Human umbilical cord mesenchymal stem cells, Human placental mesenchymal stem cells, and human adipose derived mesenchymal stem cells under serum-free conditions. The medium is chemically-defined, and the batch differences are small. The medium does not contain animal derived ingredients, so it can reduce contamination by various viruses, mycoplasma, endotoxins, and other substances. Not only it can effectively promote the proliferation of primary cells obtained by enzymatic digestion and tissue adhesion methods, but it can also stably passage serial generations and maintain the multipotency of cells (i.e., have the ability to differentiate into adipogenesis, osteogenesis, and chondrogenesis).

Strengths

- Chemically defined, animal component free, low protein concentration, high safety.
- Fully support serum-free culture without the need for serum or serum substitutes (multiple cytokines need to be added)
- Strong amplification ability, can effectively promote the proliferation of primary cells obtained by enzyme digestion and tissue adhesion methods.
- Stably passage serial times and maintain the multipotency
- cGMP standard production, using single-use production technology, reliable product quality and performance, and high consistency between batch to batch.

Product	Catalog No.	Form	Package Sizes
Stem Cell 1	11901-1492	Dry powder	2 L, 10 L, 100 L, Customized
	11901-23049	Liquid	500 mL, 1000 mL, Customized

Component Information

Without phenol red, any animal-origin components.

Safety Warning

Read the Material Safety Data Sheets (MSDS) and follow handling instructions. Wear appropriate protective eyewear, clothing, and gloves.

Intended Use

For research and further manufacturing use only.

Storage and Stability

Powder Medium

The dry powder medium should be stored at 2–8°C and protected from light. The product is stable for 24 months, when unopened and stored properly. This product is very hygroscopic and should be kept in a dry environment away from moisture.

Liquid Medium

The liquid medium should be stored at 2–8°C and protected from light. The product is stable for 12 months, when unopened and stored properly. Addition of other supplements may affect storage conditions and shelf life. Do not use

any bottle of medium that shows evidence of particulate matter or cloudiness.

Method of Use

1. **Coat culture carriers:** For different specifications of culture plates/flasks/cell factories, add an appropriate amount of coating solution and incubate for 1–2 hours.
2. **Primary cell isolation/cell seeding:** Tissue blocks/ mesenchymal stem cells digested by enzymes or revived from cryopreservation are cultured onto a pre-coated carrier.
3. **Passage cells:** Digest with trypsin, centrifugate to collect cells, and continually passage and culture cells according to a certain density.
4. **Harvest and cryopreserve cells:** Digest with trypsin, centrifugate to collect cells, and cryopreserve cells with cryopreservation solution according to a certain density.