Human Mesenchymal Stem Cells (Bone Marrow Derived)

Catalog No.	Product Name	Product quantity	Short-term Storage	Long-term Storage	Thawing Instructions
ax9002	MSCs (Bone Marrow Derived)	1 million cells / vial	Liquid nitrogen	Liquid nitrogen	See below
ax9006	MSC Expansion Medium for Bone Marrow Derived MSCs	500 mL	4°C for 1 month	-20°C for 6 months	Thaw at 4°C or RT

Lot-specific information such as donor details and passage number are stated in the Certificate of Analysis for each product.

Recommendations:

Always count the number of viable cells after thawing

- Recommended culture vessel coating: Not required
- Recommended cell culture medium: Axol MSC Expansion Medium for Bone Marrow Derived MSCs
- Recommended seeding density: 5,000-10,000 viable cells/cm^2
- Recommended centrifugation speed: 200 x *g* for 5 min

Thawing & Plating:

- Thaw the cells quickly in a 37°C water bath until just prior to complete thawing
- Wipe the outside of the vial with 70% ethanol
- Gently resuspend the cells and take an aliquot to perform a cell count.
- Slowly dilute the cells into the required volume of pre-warmed **MSC Expansion Medium** (must be at least 10 mL so that the concentration of DMSO is less than 1%).
- Rinse the cryovial with 1 mL of **MSC Expansion Medium** to ensure all of the cells are transferred.
- Seed cells into the culture vessel at the recommended seeding density
- Once the cells have attached (after 6-24 h), replace the culture medium with fresh pre-warmed **MSC Expansion Medium**
- Frequency of media changes: Every 2-3 days

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Passaging:

- Passage when the culture reaches: 70-90% confluent
- Recommended passaging reagent: Trypsin/EDTA
- Neutralize the trypsin with **MSC Expansion Medium** and centrifuge the cells at 200 x *g* for 5 min
- Remove the supernatant and resuspend in 1-2 mL of pre-warmed **MSC Expansion Medium**
- Perform a cell count to determine the number of viable cells
- Dilute the cells into the required volume of pre-warmed **MSC Expansion Medium**
- Seed cells into the culture vessel at the recommended seeding density

It is recommended that the Mesenchymal Stem Cells are used for endpoint assays prior to passage 6 for optimal performance in your experiments

Usage Statement:

Our products are intended for research use only and are not to be used for any other purpose, which includes but is not limited to, unauthorized commercial uses, *in vitro* diagnostic uses, *ex vivo* or *in vivo* therapeutic uses or any type of consumption or application to humans.

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