Human Bone Marrow Mononuclear Cells

Catalog No.	Product Name	Product quantity	Short-term Storage	Long-term Storage	Thawing Instructions
ax3426	Bone Marrow CD34$^+$ Progenitor Cells	500,000 cells/vial	Liquid nitrogen	Liquid nitrogen	See below
ax3428 ax3429 ax3430 ax3431 ax3432 ax3433 ax3434 ax3435 ax3436 ax3437 ax3438 ax3439 ax3440 ax3441 ax3442 ax3443 ax3444 ax3445 ax3446 ax3447 ax3448 ax3451	Bone Marrow Mononuclear Cells	10 million cells/vial	Liquid nitrogen	Liquid nitrogen	See below
ax3460	Mononuclear Cell Maintenance Medium	100 mL	Store at 4°C for up to 1 month	Aliquot and store at -20°C for up to 6 months	Thaw at 4°C or at room temperature

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: **Mononuclear Cell Maintenance Medium**
- Recommended seeding density: **As required (~1 million cells / mL)**
- Recommended centrifugation speed: **400 x *g* for 10 minutes**

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Thawing & Plating:

- Transfer the vial of cells from liquid nitrogen storage with the vial buried in dry ice. Remove the vial from dry ice and transfer it immediately to a **37°C** water bath.
- 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 transfer to a 15 mL sterile conical tube.
- Slowly add **10 mL** of pre-warmed, **37°C**, **Mononuclear Cell Maintenance Medium**.
- Rinse the cryovial with 1 mL of **Mononuclear Cell Maintenance Medium** to ensure all of the cells are transferred.
- Centrifuge the cells at **400 x *g*** for **10 min**.
- Carefully remove the supernatant and resuspend the cell pellet in **2 mL** of pre-warmed, **37°C**, **Mononuclear Cell Maintenance Medium**.
- Perform a cell count to determine the number of viable cells.
- Dilute the cells into the required volume of pre-warmed, **37°C**, **Mononuclear Cell Maintenance Medium**.
- Seed cells into the culture vessel at the required seeding density.
- Proceed with experiment assays.
- Incubate the cells at **37°C**, **5% CO_2** in a humidified incubator.

Passaging:

The hematopoietic cells should be used directly for endpoint assays and should not be cultured long-term or passaged. The **Mononuclear Cell Maintenance Medium** is designed to maintain hematopoietic cells after thawing and short-term culture. Expansion of the cells may lead to a loss of cell types and dominance of certain subtypes. The expanded cells may also exhibit dependency on the particular cytokines and growth factors used.

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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.

Got any questions? Need help with the protocol?
Contact Axol Technical Support at **support@axolbio.com**
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