

User Manual

OriCell™ Complete Medium

For Mouse Bone Marrow

Mesenchymal Stem Cells

Catalog No. MUXMX-90011



Introduction

OriCell™ Complete Medium For Mouse Bone Marrow Mesenchymal Stem Cells is specially formulated and developed by our R&D team. It consists of an optimized basal medium, premium fetal bovine serum (FBS), and essential growth supplements, all tailored for mouse bone marrow mesenchymal stem cells.

Extensive cell culture data have demonstrated that this product supports the long-term maintenance and healthy growth of mouse BMSCs in vitro, enabling them to retain their multi-lineage differentiation potential—including osteogenic, adipogenic, and chondrogenic lineages—even after multiple passages.

Note: This product is intended for research use only and is not for diagnostic, therapeutic, clinical, household, or any other applications.

When citing our products in academic publications, please use the following format: “OriCell™ [Product Name] + [Catalog Number], from Cyagen Biosciences.”

Product Information

Components	Catalog Number	Volume	Storage
OriCell™ Basal Medium For Cell Culture	BDMF-03011	450 mL	4 °C
OriCell™ Fetal Bovine Serum + Culture Supplement (For Mouse Bone Marrow Mesenchymal Stem Cells)	MUXMX-05001	50 mL	-20 °C

QC

- Pass the detection of bacteria, fungi, mycoplasma, and endotoxins.
- Pass the detection of osmotic pressure and pH.
- Pass the detection of product quality.

Please refer to "COA" for details.

General Handling Principles

1. Maintain strict aseptic technique. Ensure complete sterility throughout all procedures, particularly within the laminar flow hood and incubator.
2. Follow standardized protocols. Adhere strictly to the product manual instructions. Implement rigorous control over experimental variables and include appropriate parallel controls.
3. Ensure proper storage and use. Store all components according to specified conditions and use them promptly to ensure optimal performance.
4. Aliquot for long-term storage. If the entire volume will not be used up immediately, prepare the medium in batches according to the specified component volume ratios and store in aliquots.

Product Stability and Storage Conditions

1. All components must be stored away from light.
2. The basal medium has a shelf life of 1 year and should be stored at 4 °C. Other component has a shelf life of 2 years and should be stored at -20 °C.
3. Once prepared, the medium has a shelf life of 1 month when stored at 4 °C. The shelf life may be extended up to a maximum of 45 days, provided that culture conditions remain stable, the container is properly sealed, and repeated temperature fluctuations are avoided.
4. Use all components before the expiration dates. Expired components may severely compromise culture performance.

Preparation of Complete Medium

Materials Required

- OriCell™ Complete Medium For Mouse Bone Marrow Mesenchymal Stem Cells (Cat. No.: MUXMX-90011)
- Clean, sterile, and stable quality disposable consumables (pipettes, pipette tips, centrifuge tubes, etc.)
- Clean sealing film
- Aluminum foil and other light-avoiding materials

Steps

1. At least 6 hours before preparation, place the OriCell™ Fetal Bovine Serum + Culture Supplement (For Mouse Bone Marrow Mesenchymal Stem Cells) (Cat. No.: MUXMX-05001) in

a refrigerator at 4°C to allow it to thaw completely.

Note: Floccs (primarily composed of fibrin) may appear in thawed serum and will not affect product performance. Removal of floccs is generally unnecessary unless the cell culture system demands a high degree of purification.

2. Carefully wipe the outer packaging of all components with 75% ethanol. Open the package inside a clean bench (laminar flow hood).
3. Add all of the serum (Cat. No.: MUXMX-05001) to OriCell™ Basal Medium (Cat. No.: BDMF-03011).
4. Tighten the cap of the basal medium bottle and swirl the bottle gently to mix thoroughly.

Note:

1) If the medium will not be used up immediately, we recommend preparing in batches. Please prepare the required amount according to the ratio of each component in the kit. Any remaining components must be stored according to their respective storage conditions and should not be subjected to multiple freeze-thaw cycles.

2) Please choose whether to add antibiotics (e.g., Penicillin/Streptomycin) according to your own needs. If required, it should be prepared or purchased separately.

5. Seal the bottle with Parafilm, wrap it in aluminum foil to protect from light, and label it with the product name, preparation date, and other relevant information.

Note: All components in the OriCell™ Complete Medium For Mouse Bone Marrow Mesenchymal Stem Cells are strictly aseptically controlled. Under normal circumstances, we do not recommend sterilizing it again. However, if there is a risk of contamination during the preparation process, the complete medium can be filtered and sterilized.

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