



Human iPSC-Derived Macrophages in a 96-Well Plate Format



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Product Information

Catalog. No.	Product Name	Format	Stock Conc.	Storage on Arrival	Thawing Instructions	Storage Once Thawed
ax0601	Plated Human iPSC-Derived Macrophages (Male)	1x 96-well plate 15,000 cells/well	N/A	37°C	N/A	N/A
ax0606	Plated Human iPSC-Derived Macrophages (Female)	1x 96-well plate 15,000 cells/well	N/A	37°C	N/A	N/A
ax0600	Macrophage Maintenance Medium	250 mL	1x	Store at 4°C for 2 months	N/A	N/A

Additional Reagents		
Product Name	Provider	Catalog. No.
Recombinant Human M-CSF	Gibco, Life Technologies	PHC9501

These reagents must be added fresh for each use to each aliquot of medium.



Preparation of Reagents

Recombinant Human Macrophage Colony Stimulating Factor (M-CSF)

- Prepare a **100 µg/mL** stock solution of **M-CSF** by resuspending the **100 µg** of lyophilized powder in **1 mL** of Dulbecco's-PBS (1x) (D-PBS without calcium or magnesium) supplemented with **0.05 %** human serum albumin.

Macrophage Maintenance Medium

- Upon receipt, store **Macrophage Maintenance Medium** at **4°C** protected from light.
- **Macrophage Maintenance Medium** requires supplementing with **M-CSF** before use.
- Prepare the volume of **Macrophage Maintenance Medium** required by adding **M-CSF** (**100 ng/mL**). Once **M-CSF** has been added the medium is stable for **1 week** at **4°C**.
- Pre-warm an aliquot of **Macrophage Maintenance Medium** to **37°C** before use.

Hematopoietic Factor	Stock Concentration	Final Concentration	50 mL Medium
M-CSF	100 µg/mL	100 ng/mL	50 µL

Maintenance of Human iPSC-Derived Macrophages

Axol iPSC-Derived Macrophages are derived from iPSCs that have undergone an intermediate differentiation to monocytes prior to directed terminal differentiation to macrophages. The cells you receive will have undergone 6 days of macrophage differentiation and should therefore be used within 7 days to avoid overactivation of the macrophages, which typically occurs at day 14.

The 96-well plate will arrive in a sealed plastic bag and the wells will be capped with a silicone seal. The **Human iPSC-Derived Macrophages** will be shipped on day 6 post-differentiation of human iPSC-derived monocytes.

- Carefully open the plastic package and place the 96-well plate into a class II biosafety cabinet. Making sure to spray the plate with 70% ethanol and wipe it down.
- Remove the silicone sealing cap from the plate.
- Check cells under the microscope.
- Incubate the plate at **37°C, 5% CO₂** for **2 hours**.
- After the incubation period gently replace the half the volume of medium with fresh, pre-warmed **37°C, Macrophage Maintenance Medium**.
- Incubate the plate at **37°C, 5% CO₂**.
- To maintain a healthy macrophage culture, replace the half the volume of medium with fresh, pre-warmed **37°C, Macrophage Maintenance Medium** every **4 days**.
- Conduct preferred assays within **7 days** of receiving the cells.

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





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