axol

Human Corneal Epithelial Cells

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Catalog. No.	Product Name	Format	Short-term Storage	Long-term Storage	Thawing Instructions
ax3502	Corneal Epithelial Cells	500,000 cells/vial	Liquid Nitrogen	Liquid Nitrogen	See below
ax3533	Corneal Epithelial Cell Culture Medium	500 mL	4ºC for 1 month	-20ºC for 6 months	Thaw at 4ºC or RT
ax0044	Unlock	25 mL	Aliquot and store at -80ºC	-80ºC	Thaw at 4ºC

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

Recommendations

Important!

Always count the number of viable cells after thawing.

- Recommended culture vessel coating: Not required
- Recommended cell culture medium: **Corneal Epithelial Cell Culture Medium**
- Recommended seeding density: **4,000 viable cells/cm²**
- Recommended centrifugation speed: **200 x *g*** for **5 minutes**

Thawing and 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 **37ºC** 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.
- **Immediately after thawing**, slowly dilute the cells into the required volume of pre-warmed **Corneal Epithelial Cell Culture Medium** (must be at least **10 mL** so that the concentration of DMSO is less than 1%).
- Rinse the cryovial with **1 mL** of **Corneal Epithelial Cell Culture Medium** to ensure all of the cells are transferred.
- Seed cells into the culture vessel at the recommended seeding density of **4,000 viable cells/cm²**.
- Incubate the cells at **37°C**, **5% CO_2** in a humidified incubator.
- Once the cells have attached (after 6-24 hours), replace the culture medium with fresh, pre-warmed **Corneal Epithelial Cell Culture Medium**.
- Frequency of media changes: **Every 2 days**

Passaging

- Passage when the culture reaches: **70-80% confluent**
- Recommended passaging reagent: **Unlock**
- After adding passaging reagent, incubate the cells for **5 minutes** at **37°C**. Observe the cells at regular intervals for detachment from the culture vessel.
- Once the cells have detached from the culture vessel, dilute out the passaging reagent with **Corneal Epithelial Cell Culture Medium**.
- Centrifuge the cells at **200 x *g*** for **5 minutes**.

Important!

It is important that the cells are centrifuged in order to remove the passaging reagent before plating the **Corneal Epithelial Cells**.

- Remove the supernatant and resuspend in **1-2 mL** of pre-warmed **Corneal Epithelial Cell Culture Medium**.
- Perform a cell count to determine the number of viable cells.
- Dilute the cells into the required volume of pre-warmed **Corneal Epithelial Cell Culture Medium**.
- Seed cells into the culture vessel at the recommended seeding density of **4,000 viable cells/cm^2**.
- Incubate the cells at **37°C**, **5% CO_2** in a humidified incubator.

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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Notes

Notes

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