



Product Information Sheet

Chinese Hamster Ovary, K1 (CHO-K1) Cells

Catalog Numbers: ORF.CHOK1-500

Product Overview	
Product Name	Chinese Hamster Ovary, K1 (CHO-K1) Cells
Catalog Numbers	ORF.CHOK1-500
Sizes	≥500,000 cells/vial
Product Form	Cryopreserved (Frozen)
Cell Type	Chinese Hamster Ovary Epithelial Cells
Additional Reagents Required	CHO-Adhere Growth Medium

Product Description	Product Image
<p>CHO-K1 cells are a widely used mammalian cell line derived from the ovary of the Chinese hamster (<i>Cricetulus griseus</i>). These adherent epithelial cells are a workhorse for biopharmaceutical manufacturing, recombinant protein expression, and DNA studies due to their robust growth, adaptability to various culture conditions, and stable transfection efficiency.</p> <p>Applications for CHO-K1 cells include:</p> <ul style="list-style-type: none"> Therapeutic protein production Gene editing experiments Receptor-ligand interaction studies Glycosylation profiling of recombinant proteins <p>They display reliable adherence characteristics, a well-documented genetic profile, and have been optimized for high viability and consistent growth.</p>	

For research applications only. Not for diagnostic or therapeutic use.



Cell Characteristics	
Growth Characteristics	Adherent monolayer under standard culture conditions
Cell Origin	Chinese hamster (<i>Cricetulus griseus</i>)

Cell Thawing and Plating Protocol	
Thawing	To thaw CHO-K1 cells, remove the vial from dry ice or liquid nitrogen storage and promptly place it in a 37°C water bath. Gently agitate the vial continuously while monitoring for thawing. As soon as only a small amount of ice remains, remove the vial from the bath to prevent over-thawing, which can compromise cell viability. Immediately disinfect the outside of the vial using 70% isopropanol before proceeding to the next step.
Plating	Working under sterile conditions in a laminar flow hood, carefully open the vial and transfer the contents to a sterile 15 mL conical tube. Slowly add approximately 9 mL of supplemented CHO-Adhere Growth Medium, pre-warmed to 37°C, to the cell suspension. Centrifuge the tube at 200 × g for 10 minutes to pellet the cells. After centrifugation, discard the supernatant and gently resuspend the pellet in an appropriate volume of fresh, pre-warmed supplemented CHO-Adhere Growth Medium to achieve a plating density of 20,000 cells per cm ² of surface area. Transfer the resuspended cells into a suitable culture flask or dish. After 24 hours, aspirate the medium, and replace with fresh, pre-warmed supplemented CHO-Adhere Growth Medium.
Observation and Expansion	Following thawing, it is normal for CHO-K1 cells to grow slowly during the first week. Some cell loss may occur during initial medium exchanges, which is expected. Once the culture reaches approximately 70–80% confluence, the cells should be sub-cultured using a 1:3 split ratio. For passaging, use 0.25% Trypsin-EDTA solution (not included), following standard cell culture protocols.

Storage and Stability		
	Storage Temperature	Storage Time
CHO-K1 Cells (ORF.CHOK1-500)	Liquid Nitrogen	12 months
CHO-Adhere Growth Media (Base Media) (ORF.CHOAD-450, ORF.CHOAD-900)	2–8°C	3 months
Supplemented CHO-Adhere Growth Medium	2–8°C	Up to 3 weeks

Avoid repeated freeze-thaw cycles for cells. Avoid repeated exposure to room temperature and light for media.

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