Product Information Sheet  
**Chinese Hamster Ovary, K1 (CHO-K1) Cells**   
Catalog Numbers: ORF.CHOK1-500

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| **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 |

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| **Product Description** | **Product Image** |
| CHO-K1 cells are a widely used mammalian cell line derived from the ovary of the Chinese hamster (*Cricetulus griseus*). 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.  Applications for CHO-K1 cells include:  Therapeutic protein production  Gene editing experiments  Receptor-ligand interaction studies  Glycosylation profiling of recombinant proteins  They display reliable adherence characteristics, a well-documented genetic profile, and have been optimized for high viability and consistent growth. |  |

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| **Cell Characteristics** | |
| **Growth Characteristics** | Adherent monolayer under standard culture conditions |
| **Cell Origin** | Chinese hamster (Cricetulus griseus) |

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| **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 cm² 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. |

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| **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. | | |