CHOZON® CHO K1
Host Cell Line
Catalog No. CHOK1-1VL

Product information
The CHOZON® CHO K1 line is a suspension CHO K1 cell line, adapted for growth in chemically defined media for the expression of recombinant proteins. The cell line comes with full traceability documentation and was banked in cGMP conditions. Several cGMP produced chemically defined media are recommended for use with the CHOZON CHO K1 cell line.

Cell Line Origin
This cell line is of chinese hamster ovary origin. The parental CHO cell line was originated by Puck in 1957. The CHO K1 line was subcloned from this line and deposited at ECACC in 1985. A vial of the ECACC CHO K1 was thawed by SAFC and adapted to chemically defined suspension culture in 2006 to create the CHOZON CHO K1 cell line.

Growth and Productivity
Refer to technical bulletin for full thawing, culturing and transfection protocols. Typical viabilities seen in stock cultures are high nineties (95-98%) with passaging every 3-4 days. A seven day growth assay performed on the cells in duplicate showed day 7 viable cell densities at 6-7e6 cells/ml (Figure 1).

The CHOZON CHO K1 cell line has been shown to product 5+g/L in a fed batch process by customers using proprietary expression vectors. (http://www.bioprocessintl.com/upstream-processing/bioreactors/fed-batch-cell-culture-process-development-implementing-novel-nutrient-additive-robust-high-titer-scalable-process/)

Legal Information
The CHOZON CHO K1 cell line is sold for research use only. A commercial license must be taken prior to use of the cell line, or any products derived from the cell line, in a commercial process. Please contact your local sales representative or chozn@sial.com for more details.

Product components
CHOZON CHO K1 cells are provided to customers in vials containing 1ml at 1e7 cells/ml. Cells are banked in EXCELL CD Fusion (Cat No 14365C) containing 4mM L glutamine, 7% DMSO.

Features and benefits
• Suspension adapted
  – Easy culturing
  – High viable cell density achievable
• Serum free growth
  – Cells can be cultured in chemically defined media for progression into commercial processes
• Detailed protocols for thawing, culturing and transfection
  – Clear guidelines for obtaining optimal performance
• Full Traceability and cell line documentation package available
  – Outlines the history of the CHOZON CHO K1 line as it was suspension adapted and adapted for growth in chemically defined media as well as characterization and testing results at the time of cGMP banking
  – Document can be used to support regulatory filings for commercial applications

Figure 1. Seven day growth assay performed on the CHOZON CHO K1 cell line. Samples run in duplicate. Growth Media: EX-CELL® CD CHO Fusion Feed: 3g/L Glucose + 4mM Glutamine