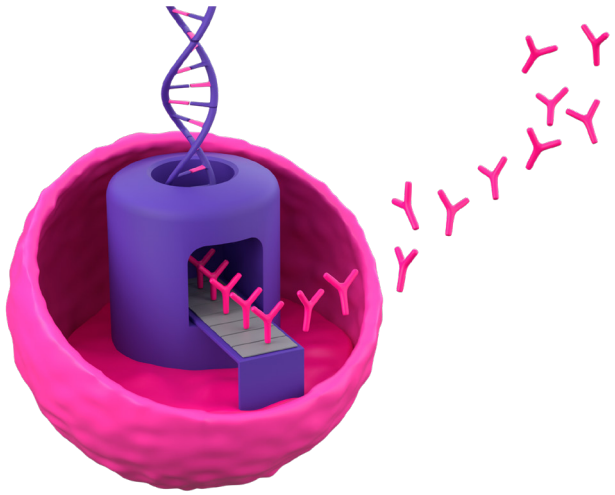
SAFC®
Pharma & Biopharma Raw Material Solutions

Data Sheet

CHOZN® Elite Cell Line

Next Generation CHO Host to Boost Your Yield



Product Description

The CHOZN® Elite cell line is a subclone of the CHOZN® GS KO cell line that outperforms the parental cell line in Cell Line Development (CLD) efficiency, predictable growth, protein production, and other performance metrics.

CHOZN® Elite is a CHO (Chinese Hamster Ovary) mammalian cell expression system that grows in suspension culture with chemically defined and animal component-free media. It is a Glutamine Synthetase (GS) knock out rendering the cells auxotrophic for the essential amino acid L-glutamine, which enables fast and easy selection of clones. The cell line was tested for adventitious agents and is banked under cGMP conditions.

A technical user guide, with detailed protocols for optimal performance, is provided with the cell line.

Product Components

CHOZN® Elite cells are provided to customers in vials containing 1 mL at 8×10^6 cells/mL. Cells are cGMP banked in EX-CELL® CD CHO Fusion Medium (with 6 mM L-glutamine) and 7% DMSO. A CHOZN® pCGS3.2 Expression Vector can be provided with the cell line. Please contact your local sales representative for more details.

Legal Information

The CHOZN® Elite cell line is sold for research use only. A license agreement must be acquired prior to use of the cell line, or any products derived from the cell line in a clinical or commercial process. Please contact your local sales representative for more details.

Features and Benefits

- Enables high producing clones, achieving a titer of 7–13 g/L with the standard vector, resulting in cost savings.
- Easy to adopt, the cell line is plug-and-play with your established CLD processes, for use in both fed-batch and perfusion processes.
- Provides highly stable clones with 85% of clones maintain ≥70% of the titer over 60 generations.
- Demonstrates consistent & predictable growth profile, from 18 to 24 x 10^6 cells/mL for fed-batch.
- Traceable from CHOZN® $GS^{-/-}$ ZFN modified CHO cell line.
- Ensures regulatory compliance, with the cell line cGMP banked and adventitious agent tested.

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Cell Line Origin

CHOZN® Elite is a mammalian cell line whose lineage was derived from the ovary of an adult Chinese hamster. The aneuploid, proline-requiring CHO-K1 parental cell line was established by T. Puck in 1958.

We adapted a subclone from the European Collection of Authenticated Cell Cultures (ECACC) to suspension growth in SAFC® chemically defined cell culture media. Next, we transfected this clone using our proprietary CompoZr® Zinc Finger Nuclease (ZFN) technology to develop the CHOZN® GS$^{-/-}$ ZFN modified CHO cell line (CHOGS-1VL).

Subsequently, we created the CHOZN® Elite cell line from clones isolated from the CHOZN® GS$^{-/-}$ host expressing a benchmark monoclonal antibody, which were evaluated for favorable bioproduction phenotypes. After complete removal of the stably integrated benchmark transgene, candidate subclones underwent cell line development with a new molecule to assess their suitability as a host cell line. This process resulted in CHOZN® Elite, a cell line with enhanced performance and shortened cell line development times.

Ordering Information

Product Description	Cat. No.
CHOZN® Elite Cell Line	
CHOZN® Elite Cell Line – 1 Vial	**ELITE-1VL**
CHOZN® Elite Research Agreement – Initiation Fee	**ELITE-RA-IF**
CHOZN® pCGS3.2 Expression Vector	**PCGS32-1VL**
Related Products	
Cell Culture Media & Feeds for Fed-Batch	
4CHO Cell Culture Media & Feed Discovery Kit	**504505**
EX-CELL® CD CHO Fusion Medium	**14365C/24365C**
Cellvento® 4CHO-C Cloning Medium	**14390C**
EX-CELL® Advanced CHO Fed-Batch Medium	**14366C/24366C**
Cellvento® ModiFeed Prime COMP Feed	**104132**
Cell Culture Media for Perfusion	
EX-CELL® Advanced HD Perfusion Medium	**24370C**
Cellvento® 4CHO-X COMP Expansion Medium	**103840**

BioReliance® Biosafety Services

Our BioReliance® contract testing services offers comprehensive cell bank development, characterization, and secure storage services, ensuring reliable starting materials for clinical and commercial manufacturing. Our facilities comply with global GMP standards and provide split-site storage options to ensure your materials will remain safe. Learn more at **SigmaAldrich.com/BiosafetyTesting**

We provide information and advice to our customers on application technologies and regulatory matters to the best of our knowledge and ability, but without obligation or liability. Existing laws and regulations are to be observed in all cases by our customers. This also applies in respect to any rights of third parties. Our information and advice do not relieve our customers of their own responsibility for checking the suitability of our products for the envisaged purpose.

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MilliporeSigma
400 Summit Drive
Burlington, MA 01803

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