

CHO-CXCR4 | 305411L

General information

Description	CHO-CXCR4-Medium-high is a CHO (Chinese Hamster Ovary) cell line expressing CXCR4 at a medium-high level. It is used for antibody screening, CXCR4-targeted therapy development, HIV entry research, hematopoietic stem cell biology, and flow cytometry. CXCR4, also known as CD184, is a G-protein-coupled receptor (GPCR) that plays a role in hematopoiesis, stem cell migration, and cancer progression.
Organism	CHO
Tissue	CHO
Disease	Chinese hamster ovary, non-neoplastic; genetically engineered for CXCR4 surface expression (low expression level)
Applications	Antibody screening; CXCR4-targeted therapy development; HIV entry research; hematopoietic stem cell biology; flow cytometry
Synonyms	CHO-CXCR4

Cell characteristics

Age	CHO
Gender	CHO
Morphology	CHO cells
Cell type	Epithelial cells
Growth properties	CHO cells

Quality control and documentation

Citation	CHO-CXCR4 (Cytion 305411MH)
Biosafety level	1

NCBI_TaxID	10029
CellosaurusAccession	CVCL_A8V9
GMO Status	GMO-S1: This CHO line contains a recombinant construct enabling low-level expression of human CXCR4 for chemokine receptor studies. This classification applies only within Germany and may differ elsewhere.

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Receptors expressed	CXCR4 (CD184)
+	+

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Culture Medium	DMEM:Ham's F12 (1:1), w: 3.1 g/L , w: 2.5 mM L- , w: 15 mM HEPES, w: 0.5 mM , w: 820400a) . CHO Growth Medium A (InSCREENeX; InSCREENeX INS-ME-1039)
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Supplements 100% DMEM, 10% FBS, 100% DMEM, 5% FBS, Geneticin (G418-Sulfat) 500 µg/ml, 100% DMEM, 0.5 µg/ml.

Dissociation Reagent □□□□□□□□ □□□□□□ □□□□□□□□-EDTA

Doubling time approx. 14-16 hours

Subculturing [1] 1. Remove the medium from the flask. Wash the cells with 10 ml of PBS. 2. Add 10 ml of PBS to the flask. 3. Gently resuspend the cells. 4. Transfer the cells to a new flask. 5. Add 10 ml of fresh medium. 6. Incubate the cells in the new flask for 24 hours.

Split ratio 1 to 5

Seeding density 2 to 5 x 10⁴ cells/cm²

Fluid renewal 2 ☐☐ 3 ☐☐☐☐ ☐☐☐☐☐☐

Post-Thaw Recovery XXXX XXXXX, XX XX XXXXX XXX 1:2 XX 1:3 XXXXXXX T25 XXXXX XXXXX 24 XXXX XX XXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX (

Freeze medium α -MEM (Gibco), 10% FBS (Gibco) + 10% DMSO (Gibco) α -MEM (Gibco), 10% FBS (Gibco) + 10% DMSO (Gibco), CM-1 (Gibco)

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**Thawing and
Culturing Cells**

1. Thaw the vial rapidly in a water bath at 37 °C. Remove the vial as soon as the contents have thawed and transfer the cells to a sterile tube. Centrifuge at 300 x g for 5 minutes. Remove the supernatant and resuspend the cells in 1 ml of complete medium. Seed the cells into a 24-well plate (150,000 cells per well) or a 96-well plate (15,000 cells per well). Incubate at 37 °C in 5% CO₂.
2. After 24 hours, check for cell attachment. If cells are not attached, replace the medium with fresh complete medium. If cells are attached, replace the medium with fresh complete medium.
3. After 48 hours, check for cell attachment. If cells are not attached, replace the medium with fresh complete medium. If cells are attached, replace the medium with fresh complete medium.
4. After 72 hours, check for cell attachment. If cells are not attached, replace the medium with fresh complete medium. If cells are attached, replace the medium with fresh complete medium.
5. After 96 hours, check for cell attachment. If cells are not attached, replace the medium with fresh complete medium. If cells are attached, replace the medium with fresh complete medium.
6. After 120 hours, check for cell attachment. If cells are not attached, replace the medium with fresh complete medium. If cells are attached, replace the medium with fresh complete medium.
7. After 144 hours, check for cell attachment. If cells are not attached, replace the medium with fresh complete medium. If cells are attached, replace the medium with fresh complete medium.
8. After 168 hours, check for cell attachment. If cells are not attached, replace the medium with fresh complete medium. If cells are attached, replace the medium with fresh complete medium.

**Incubation
Atmosphere**

37 °C, 5% CO₂, humidified atmosphere.

**Shipping
Conditions**

Cryopreserved cell lines are shipped on dry ice in validated, insulated packaging with sufficient refrigerant to maintain approximately -78 °C throughout transit. On receipt, inspect the container immediately and transfer vials without delay to appropriate storage.

**Storage
Conditions**

For long-term preservation, place vials in vapor-phase liquid nitrogen at about -150 to -196 °C. Storage at -80 °C is acceptable only as a short interim step before transfer to liquid nitrogen.

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Sterility

The cells are supplied as a suspension in complete medium. The cells are free of mycoplasma contamination. The cells are free of endotoxins. The cells are free of viruses. The cells are free of bacteria. The cells are free of fungi. The cells are free of parasites. The cells are free of all other contaminants.