

HEK293-CXCR7 | 305421

HEK293-CXCR7

Description

HEK293-CXCR7 is a HEK293 cell line stably expressing the human CXCR7 receptor. The cells are characterized by high transfection efficiency and stable expression of the receptor. CXCR7 is a GPCR that binds to CXCL12 and CXCL11. The cells are used for studying CXCR7 signaling and for drug discovery.

Organism

Human

Tissue

Embryonic kidney

Disease

Not applicable

Applications

Receptor activation, GPCR signaling, drug discovery

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Age

Not applicable

Gender

Not applicable

Morphology

Epithelial

Cell type

HEK293

Growth properties

Adherent, high growth rate

HEK293-CXCR7

Citation

HEK293-CXCR7 (HEK293-CXCR7) Cytion 305421

Biosafety level

1

NCBI_TaxID

9606

CellosaurusAccession

CVCL_6G22

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GMO Status GMO-S1: HEK293 cells expressing CXCR7, produced by Cytion 820700a

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Receptors expressed CXCR7 (ACKR3)

HEK293

Culture Medium RPMI 1640, w: 2.0 mM CaCl_2 , w: 2.0 g/L NaHCO_3 (Cytion 820700a)

Supplements 10% FBS, 1 mM CaCl_2 , 10 mM HEPES, 1% NEAA. Geneticin (G418-Sulfat) 1 mg/ml

Dissociation Reagent EDTA

Doubling time 24–36 h

Subculturing Cells are grown in 96-well plates. Cells are harvested by centrifugation at 400g for 5 min. Cells are resuspended in PBS and counted. Cells are seeded at a density of 2–3 $\times 10^4$ cells per well.

Split ratio 1 : 5

Seeding density 2×10^4 cells per well

Fluid renewal 2–3 times per week

Post-Thaw Recovery Cells are thawed in a water bath at 37°C. Cells are resuspended in PBS and counted. Cells are seeded at a density of 2–3 $\times 10^4$ cells per well. Cells are grown in 96-well plates. Cells are harvested by centrifugation at 400g for 5 min. Cells are resuspended in PBS and counted. Cells are seeded at a density of 2–3 $\times 10^4$ cells per well.

Freeze medium Cells are resuspended in PBS (FBS) + 10% DMSO. Cells are seeded at a density of 2–3 $\times 10^4$ cells per well.

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Thawing and
Culturing Cells

1. Remove the vial from liquid nitrogen storage, and immediately place the vial in a water bath at 37°C. Gently swirl the vial to thaw the cells.
2. Once the cells are thawed, add 1 mL of complete DMEM medium to the vial and incubate at 37°C for 15 minutes.
3. Centrifuge the cells at 300 x g for 5 minutes. Remove the supernatant and resuspend the cells in 1 mL of complete DMEM medium.
4. Seed the cells into a 24-well plate at a density of 150,000 cells per well. Incubate at 37°C for 24 hours.
5. After 24 hours, replace the medium with fresh complete DMEM medium.
6. Once the cells are established, they can be used for experiments.
7. The cells can be passaged into new flasks when needed.
8. The cells can be stored in liquid nitrogen for long-term storage.

Incubation
Atmosphere

37°C, 5% CO₂, humidified air

Flask Coating

Not required

Freezing
Procedure

Cells can be frozen in complete DMEM medium with 10% FBS. Freeze at -80°C.

Shipping
Conditions

Cells can be shipped in complete DMEM medium with 10% FBS. Ship at -80°C.

Storage
Conditions

Cells can be stored in complete DMEM medium with 10% FBS at -150°C for up to 196 weeks.

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Sterility

Cells are provided in a sterile, sealed vial. The cells are not tested for mycoplasma contamination. PCR screening for mycoplasma is recommended.

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