Product sheet

HEK293-CCR8 Cells | 305426

General information

Description	**Disclaimer: The prices displayed for cell lines are exclusively for not-for-profit customers. If you represent a commercial entity, please contact us for alternative pricing.** The HEK293-CCR8 cell line is a stable recombinant HEK293 cell line engineered to express the CCR8 receptor at a medium-high level, approximately 22,000 molecules per cell. This cell line was developed using inscreenex's landing pad technology, ensuring precise and reproducible integration of the CCR8 gene at a specific, pre-validated genomic locus. CCR8, also known as CHEMR1 or CDw198, is a G protein-coupled receptor (GPCR) that is predominantly expressed on regulatory T cells (Tregs). It plays a crucial role in the suppression of immune responses within the tumor microenvironment, aiding tumor cells in evading immune detection. Due to its role in maintaining an immunosuppressive environment, CCR8 has become a promising target for novel cancer immunotherapies aimed at enhancing anti-tumor immunity by reducing Treg-mediated suppression. The expression of CCR8 in this cell line was confirmed using flow cytometry with a target-specific antibody, ensuring consistent and reliable receptor density across the cell population.
Organism	Human
Tissue	Fetal Kidney

Characteristics

Age	Fetus
Gender	Female
Morphology	Epithelial-like
Growth properties	Monolayer, adherent

Regulatory Data

Citation	HEK293-CCR8 (Cytion catalog number 305426)
Biosafety level	1
NCBI_TaxID	9606

Biomolecular Data

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Receptors expressed	CCR8 (CHEMR1 or CDw198)

Handling

Culture Medium	RPMI 1640, w: 2.0 mM stable Glutamine, w: 2.0 g/L NaHCO3 (Cytion article number 820700a)
Subculturing	For routine adherent cell culture: Aspirate the old culture medium from the adherent cells, and wash them with PBS to remove any remaining medium. After aspirating the PBS, add the appropriate volume of Trypsin/EDTA solution based on the culture vessel size (e.g., 1 ml for a T25 flask, 3 ml for a T75 flask) and incubate at room temperature or 37?C until the cells detach (5-10 minutes). Monitor detachment under a microscope, and gently tap the vessel if necessary to release the cells. Once detached, add complete medium to inactivate the Trypsin/EDTA, gently resuspend the cells, and transfer an aliquot of the cell suspension into a new culture vessel containing fresh medium. Place the vessel in an incubator set to 37?C with 5% CO2, and change the medium every 2-3 days.
Split ratio	A ratio of 1:2 is recommended for the initial split after thawing. A ratio of 1:5 to 1:10 is recommended for routine culture.
Fluid renewal	2 to 3 times per week
Freeze medium	As a cryopreservation medium, use complete growth medium (including FBS) + 10% DMSO for adequate post-thaw viability, or CM-1 (Cytion catalog number 800100), which includes optimized osmoprotectants and metabolic stabilizers to enhance recovery and reduce cryo-induced stress.

Quality Control & Molecular Analysis

Sterility	Mycoplasma contamination is excluded using both PCR-based assays and luminescence-based mycoplasma detection methods. To ensure there is no bacterial, fungal, or yeast contamination, cell cultures are subjected to daily visual inspections.