Product sheet

HEK293-FOLR1 Cells | 305425

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-FOLR1 cell line is a stable recombinant HEK293 cell line engineered to express the FOLR1 receptor at a medium-high level, approximately 15,000 molecules per cell. This cell line was developed using inscreenex's landing pad technology, ensuring precise and reproducible integration of the FOLR1 gene at a specific, pre-validated genomic locus. FOLR1, also known as Folate Receptor Alpha (FRα) or FBP, is a GPI-anchored membrane protein with a strong affinity for folate, facilitating its transport into cells. FOLR1 is markedly overexpressed in certain cancers, such as ovarian, breast, and non-small cell lung cancers, making it a significant target for immuno-oncology therapies, including CAR T cell therapies and bispecific antibodies. The expression of FOLR1 in this cell line was confirmed using flow cytometry with a target-specific antibody, ensuring reliable and consistent 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-FOLR1 (Cytion catalog number 305425)
Biosafety level	1
NCBI_TaxID	9606

Biomolecular Data

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Receptors expressed	FOLR1 (Folate Receptor Alpha (FRα) or FBP)

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.