Product sheet

HEK293-TACD2 Cells | 305424

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-TACD2 cell line is a stable recombinant HEK293 cell line engineered to express the TACD2 receptor at a medium-high level, approximately 10,000 molecules per cell. This cell line was developed using inscreenex's landing pad technology, which ensures precise and reproducible integration of the TACD2 gene at a specific, pre-validated genomic locus. TACD2, also known as TROP2 or GA733-1, is a tumor-associated calcium signal transducer that plays a key role in intracellular calcium signaling, crucial for cellular processes such as growth, division, and differentiation. Overexpression of TACD2 has been observed in various carcinomas, including colorectal, gastric, and pancreatic cancers, making it a significant target for antibody-drug conjugates and immunotherapy. The expression of TACD2 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-TACD2 (Cytion catalog number 305424)
Biosafety level	1
NCBI_TaxID	9606

Biomolecular Data

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Receptors expressed	TACD2 (TROP2 or GA733-1)

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.