

| 300697

Description	Human embryonic kidney (HEK) 293T cells, immortalized by overexpression of SV40 large T antigen, grown in DMEM supplemented with 10% FBS.
Organism	Human
Tissue	Embryonic kidney (HEK) (Human)
Disease	None
Applications	Transient transfection, stable transfection, viral vector production, protein expression, cell-based assays.

Morphology	Epithelial cells, adherent (Growth in monolayers)
Cell type	Primary cells, immortalized cells
Growth properties	High growth rate

Citation	Heinzel T, et al. (2013) Human embryonic kidney (HEK) 293T cells (ATCC CRL-1573) (Cytion: 300697)
Biosafety level	1
NCBI_TaxID	9606

Culture Medium	DMEM supplemented with 10% FBS
Supplements	DMEM supplemented with 10% FBS (FBS) and 1% Pen/Strep
Dissociation Reagent	Trypsin-EDTA solution

Doubling time 48-72 h

Subculturing Cells are trypsinized 70-80% confluent, washed with PBS, and detached with EDTA. Cells are resuspended in medium.

Split ratio 1:2 to 1:3

Seeding density 5×10^3 cells/cm²

Fluid renewal 2-3 times

Freeze medium Cells are resuspended in freezing medium (DMEM + 10% DMSO) and frozen in liquid nitrogen.

Thawing and Culturing Cells

1. Thaw cells rapidly in a water bath at 37°C.
2. Dilute cells into pre-warmed medium.
3. Seed cells into a 25 cm² flask.
4. Incubate cells at 37°C in 5% CO₂.
5. Monitor cell growth and confluency.
6. Subculture cells when 70-80% confluent.
7. Repeat the process for subsequent passages.

Incubation Atmosphere 37°C, 5% CO₂

Shipping Conditions

Cells are shipped on dry ice at -78°C.

Storage Conditions

Cells are stored at -150 to -196°C.