

Cell Line | 605470

General Information

Description	COS-7 is a cell line derived from the kidney of a rhesus monkey (Cercopithecus aethiops). It is a continuous cell line that grows in the presence of SV40 T-antigen. COS-7 cells are commonly used for the production of recombinant proteins, particularly those that require post-translational modification. The cells are maintained in DMEM supplemented with 10% fetal bovine serum (FBS) and 100 µg/ml penicillin, 100 µg/ml streptomycin, and 100 µg/ml neomycin. For protein production, cells are transfected with Lipofectamine and a plasmid encoding the protein of interest. The cells are then harvested and the protein is purified from the culture supernatant.
Organism	Cercopithecus aethiops (Rhesus monkey)
Tissue	Kidney
Applications	Protein production, Transfection, SV40 T.
Synonyms	Cos-7, COS7, Cos7, CV-1 Origin Simian-7

Characteristics

Age	Adult
Gender	Male
Morphology	Epithelial cells
Cell type	Epithelial
Growth properties	Adherent, Clonal

Documentation

Citation	COS-7 (Cell Line) Cytion 605470
Biosafety level	1
NCBI_TaxID	9534
CellSaurusAccession	CVCL_0224

Cell COS-7 | 605470

Thawing and Culturing Cells

1. **Thawing:** Thaw the vial quickly in a 37°C water bath. Transfer the cells to a pre-warmed medium.
2. **Centrifugation:** Centrifuge the cells at 300 x g for 3 minutes at 4°C. Remove the supernatant and resuspend the cells in fresh medium.
3. **Seeding:** Seed the cells into a 15 cm² flask at a density of 1.5 x 10⁶ cells per flask. Incubate at 37°C with 5% CO₂.
4. **Confluency:** Once the cells reach 70% confluency, they are ready for use.
5. **Passaging:** Pass the cells into a new flask when they reach 80% confluency.
6. **Freezing:** For long-term storage, freeze the cells in a freezing medium and store at -80°C.
7. **Thawing:** Thaw the cells quickly in a 37°C water bath and seed into a new flask.
8. **Quality Control:** Perform regular quality control checks to ensure cell viability and identity.

Incubation Atmosphere

37°C, 5% CO₂, humidified

Flask Coating

Coated with poly-L-lysine

Freezing Procedure

Resuspend cells in freezing medium and store at -80°C

Shipping Conditions

Store at -80°C during shipping

Storage Conditions

Store at -150°C for 196 weeks

Cell Line / Species / HLA

Sterility

PCR confirmed negative for mycoplasmas

Endotoxin free medium