

COS-1 | 305005

General information

Description

COS-1, a cell line derived from monkey kidney fibroblasts, is used for the production of recombinant proteins. It is a derivative of the CV-1 cell line, which was established from the kidney of a rhesus monkey (Cercopithecus aethiops). COS-1 cells are highly permissive for the replication and packaging of SV40 DNA, making them suitable for the production of SV40-based expression vectors. The cells are typically grown in DMEM supplemented with 10% fetal bovine serum (FBS) and are maintained at 37°C in a humidified atmosphere of 5% CO₂. COS-1 cells are widely used in molecular biology for the production of recombinant proteins, including antibodies, enzymes, and membrane proteins. The cell line is characterized by its high transfection efficiency and ability to produce large quantities of recombinant protein. COS-1 cells are also used for the study of protein-protein interactions and the function of various proteins. The cell line is available from Cytion as a suspension culture in DMEM supplemented with 10% FBS.

Organism Cercopithecus aethiops (Rhesus monkey)

Tissue Kidney

Synonyms Cos-1, COS 1, Cos 1, COS1, Cos1, CV-1 Origin Simian-1

Characteristics

Gender Male

Morphology Adherent

Growth properties Susceptible

Additional information

Citation COS-1 (ATCC CRL-1435) | Cytion 305005

Biosafety level 1

Cell COS-1 | 305005

Thawing and Culturing Cells

1. Thaw the vial quickly in a 37°C water bath, and transfer the cells to a pre-warmed medium.
2. Centrifuge the cells at 300 x g for 3 minutes at 4°C, and resuspend the cells in 10 ml of pre-warmed medium.
3. Seed the cells into a 150 cm² flask containing 37 ml of pre-warmed medium.
4. Incubate the cells at 37°C in 5% CO₂ until they reach 70% confluency.
5. Harvest the cells by trypsinization and resuspend them in 15 ml of medium in an 8 ml vial.
6. Seed the cells into a 300 x g flask for 3 minutes at 4°C, and resuspend the cells in 10 ml of medium.
7. Seed the cells into a 10 ml vial at 10 ml of medium, and incubate the cells at 37°C in 5% CO₂.
8. Harvest the cells by trypsinization and resuspend them in 10 ml of medium.

Incubation Atmosphere

37°C, 5% CO₂, humidified air

Flask Coating

Not applicable for this cell line.

Freezing Procedure

Resuspend the cells in 1 ml of freezing medium and freeze at -78°C.

Shipping Conditions

Store the cells at -78°C during shipping.

Storage Conditions

Store the cells at -150°C for up to 196 months.

Cell Line / Species / HLA

Sterility

Cells are tested for mycoplasma contamination using PCR.

Cells are tested for endotoxin contamination using a Limulus amoebocyte lysate (LAL) assay.