

LP-1 | 300321

Product description

Description

LP-1 is a human lung fibroblast cell line, established from a patient with lung adenocarcinoma. It is a derivative of the H1299 cell line, which is a highly tumorigenic cell line. LP-1 cells are characterized by their ability to form colonies in soft agar and their resistance to anoikis. They are also characterized by their expression of FGFR3, which is a common mutation in lung adenocarcinoma. LP-1 cells are used in various research applications, including drug screening and studies on lung cancer biology.

Organism

Human

Tissue

Lung

Disease

Lung adenocarcinoma

Applications

Cell culture, drug screening, B cell research

Synonyms

LP1

Product information

Age

56 years

Gender

Male

Morphology

Epithelial cells

Growth properties

Adherent

Product details

Citation

LP-1 (Cytion 300321)

Biosafety level

1

NCBI_TaxID

9606

CellosaurusAccession

CVCL_0012

LP-1 | 300321

Cell Line: LP-1

Products IgG

Karyotype 46,XX,der(17)t(1;17)(p11;p11)

Cell Line

Culture Medium IMDM, w: 4.5 g/L Glucose, w: 4 mM L-Glutamine, w: 25 mM HEPES, w: 1.0 mM Sodium Pyruvate, w: 3.024 g/L NaHCO₃ (Cytion)

Supplements 20% FBS

Subculturing 1:2 to 1:10

Seeding density 7 x 10⁵ cells/cm²

Post-Thaw Recovery 24 hours

Freeze medium 90% FBS + 10% DMSO

- Thawing and Culturing Cells**
1. Thaw cells rapidly in a 37°C water bath.
 2. Centrifuge cells at 300 x g for 3 minutes.
 3. Resuspend cells in 10 ml of culture medium.
 4. Seed cells into a T25 flask at a density of 7 x 10⁵ cells/cm².
 5. Incubate cells in a humidified 5% CO₂ incubator at 37°C.
 6. Monitor cell growth and confluency.
 7. Subculture cells when they reach 70-80% confluency.
 8. Freeze cells for long-term storage in 1 ml of freeze medium.

LP-1 | 300321

Incubation Atmosphere 37°C, 5% CO₂, humidified

Flask Coating Cell binding

Freezing Procedure Cells are harvested by centrifugation at 300g for 5 min. The cell pellet is resuspended in freezing medium and frozen in a controlled rate freezer at -80°C.

Shipping Conditions Cells are shipped in dry ice at -80°C.

Storage Conditions Cells are stored at -150 to -196 °C in liquid nitrogen.

Cell Culture and Differentiation

Sterility

Cells are grown in the presence of antibiotics (penicillin, streptomycin, amphotericin B) to prevent contamination. PCR screening is performed to ensure the absence of mycoplasma contamination. Cells are tested for mycoplasma contamination using PCR.