

### LLC-PK1 | 607264

#### General information

**Description**

LLC-PK1 is a cell line derived from the kidney of a pig (Sus scrofa). It is a continuous cell line that is widely used in research, particularly in the study of viral infections and drug toxicity. The cells are characterized by their ability to form large, flat, epithelial-like monolayers. LLC-PK1 cells are highly resistant to trypsin digestion and are typically maintained in DMEM supplemented with 10% fetal bovine serum (FBS). They are also known for their ability to support the replication of several different viruses, including African swine fever virus (ASFV), vesicular stomatitis virus (VSV), and influenza A virus. The cell line is highly stable and has been shown to maintain its characteristics over many passages.

**Organism** Sus Scrofa

**Tissue** Kidney

**Applications** Virus production, drug toxicity testing, cell biology research

**Synonyms** LLC-PK(1), LLC-PK-1, LLC PK-1, LLc-PK1, LLC PK1, LLCPK1, Cell-Porcine Kidney 1

#### Characteristics

**Breed/Subspecies** Domestic pig

**Age** 3-4 weeks

**Gender** Male

**Morphology** Epithelial cells

**Growth properties** Adherent

#### References

**Citation** LLC-PK1 (Cytion 607264)

**Biosafety level** Biosafety Level 1 (BSL-1)



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**Thawing and Culturing Cells**

1. Thaw the cells rapidly in a water bath at 37°C. Do not allow the cells to reach room temperature. Transfer the cells to a pre-warmed medium.
2. Seed the cells into a pre-warmed flask containing 10 mL of medium. Incubate at 37°C with 5% CO<sub>2</sub>.
3. Once the cells have reached confluence, they can be used for experiments or passaged.
4. For passaging, remove the medium and wash the cells with PBS. Add 1 mL of trypsin-EDTA solution and incubate for 5 minutes at 37°C. Add 9 mL of medium to stop the reaction.
5. Centrifuge the cells at 300 x g for 5 minutes. Remove the supernatant and resuspend the cells in 10 mL of medium.
6. Seed the cells into a new flask containing 10 mL of medium. Incubate at 37°C with 5% CO<sub>2</sub>.
7. Once the cells have reached confluence, they can be used for experiments or passaged.
8. For long-term storage, harvest the cells and freeze them in a cryovial containing 1 mL of freezing medium. Store at -80°C.

**Incubation Atmosphere** 37°C, 5% CO<sub>2</sub>, humidified air

**Flask Coating** None

**Freezing Procedure** Harvest cells and freeze in freezing medium at -80°C.

**Shipping Conditions** Store at -80°C.

**Storage Conditions** Store at -150°C for 196 days.

HLA

**Sterility** The cells are provided as a suspension in a sterile medium. They are free of mycoplasmas and other contaminants.