

MDCK-II | 305233

MDCK-II

Description

MDCK-II (MDCK-II) is a cell line derived from the kidney of the dog (Canis familiaris). It is a continuous cell line that is widely used in research, particularly in the study of viral infections and drug development. MDCK-II cells are epithelial in nature and are capable of forming polarized monolayers. They are highly resistant to trypsin digestion and are typically maintained in DMEM supplemented with 10% fetal bovine serum (FBS). MDCK-II cells are also known for their ability to express a variety of receptors and transporters, making them a valuable model system for studying cellular signaling and drug transport.

Organism Canis familiaris

Tissue Kidney

Synonyms MDCK II, MDCKII, MDCKII, MDCK2, MDCK-2, MDCK Type II, MDCKII-WT

MDCK-II

Breed/Subspecies Canis familiaris

Age Adult

Gender Male

Cell type Epithelial

Growth properties Adherent

MDCK-II

Citation MDCK-II (ATCC CCL-32) (305233)

Biosafety level 1

NCBI_TaxID 9615

CellSaurusAccession CVCL_0424

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Culture Medium EMEM (MEM Eagle) 2 mM L-Glutamine-2.2 mM NaHCO₃ EBSS (Gibco 820100a)

Supplements 10 mM FBS 1 mM Penicillin 1 mM Streptomycin

Dissociation Reagent Trypsin

Subculturing Cells are harvested into PBS containing penicillin, streptomycin, and nystatin.

Freeze medium DMEM (Gibco) + 10% FBS + 10% DMSO

- Thawing and Culturing Cells**
1. Thaw cells in a 37°C water bath.
 2. Add 10 ml of DMEM + 10% FBS to a T75 flask.
 3. Centrifuge cells at 300 x g for 3 minutes.
 4. Wash cells with PBS.
 5. Resuspend cells in 15 ml of DMEM + 10% FBS.
 6. Seed cells into a T75 flask.
 7. Incubate cells for 10 days.
 8. Harvest cells into PBS.

Incubation Atmosphere 37°C, 5% CO₂

Flask Coating None

Freezing Procedure Harvest cells into DMEM + 10% FBS + 10% DMSO.

Shipping Conditions Dry ice

Product sheet

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Storage Conditions -150 °C -196 °C

HLA

Sterility (PCR)