## **Resource Summary Report**

Generated by FDI Lab - SciCrunch.org on May 2, 2025

# **MDCK**

RRID:CVCL\_0422 Type: Cell Line

**Proper Citation** 

(RRID:CVCL\_0422)

### **Cell Line Information**

URL: https://web.expasy.org/cellosaurus/CVCL\_0422

Proper Citation: (RRID:CVCL\_0422)

Sex: Female

Defining Citation: PMID:222773, PMID:5918973, PMID:6480288, PMID:12667817, PMID:13901412, PMID:19941903, PMID:21819694, PMID:21982418, PMID:24058646, PMID:25903999, PMID:32854295, PMID:33122286, PMID:33389257

**Comments:** Caution: There seem to be two distinct cell lines which were assigned NCBI\_Iran catalog number C426., Omics: Transcriptome analysis by RNAseq., Virology: Not susceptible to infection by SARS coronavirus 2 (SARS-CoV-2) (COVID-19) (PubMed=33389257)., Characteristics: Used for virus production for vaccine development, toxicology and industrial biotechnology research, and high-throughput screening (ATCC=CCL-34)., Part of: Naval Biosciences Laboratory (NBL) collection (transferred to ATCC in 1982)., Group: Vaccine production cell line.

Category: Spontaneously immortalized cell line

Name: MDCK

**Synonyms:** MDCK (NBL-2), MDCK(NBL-2), NBL-2, Madin-Darby Canine Kidney, Madin Darby Canine Kidney

**Cross References:** BTO:BTO\_0000837, CLO:CLO\_0007646, CLO:CLO\_0007647, CLO:CLO\_0050861, EFO:EFO\_0022746, MCCL:MCC:0000319, CLDB:cl3417, CLDB:cl3418, CLDB:cl3419, CLDB:cl3420, CLDB:cl3421, CLDB:cl3422, CLDB:cl3423, CLDB:cl3424, CLDB:cl3425, AddexBio:P0014003/4928, ATCC:CCL-34, ATCC:CRL-6253, BCRC:60004, BCRJ:0168, BEI\_Resources:NR-2628, CCLV:CCLV-RIE 0083,

CCRID:1101CAN-PUMC000078, CCRID:1102CAN-NIFDC00045, CCRID:3101CANGNO23, CCRID:4201CAN-CCTCC00012, CCTCC:GDC0012, CCTCC:GDC0401, ChEMBL-Cells:CHEMBL3308370, ChEMBL-Targets:CHEMBL614068, CLS:602280, ECACC:84121903, ECACC:85011435, FCS-free:41-14-47-1-8-9, FCS-free:41-14-321-2-3-3, FCS-free:41-14-427-1-4-3, FCS-free:41-14-585-1-18-2, FCS-free:41-14-587-1-18-2, FCSfree:41-14-588-2-18-2, GEO:GSM4009056, GEO:GSM4009057, GEO:GSM4009058, IBRC:C10556, IZSLER:BS CL 64, JCRB:IFO50071, JCRB:JCRB9029, KCB:KCB 2006105YJ, KCLB:10034, Lonza:153, MeSH:D061985, NCBI\_Iran:C426, PRIDE:PXD014768, PRIDE:PXD024031, PubChem\_Cell\_line:CVCL\_0422, RCB:RCB0995, TOKU-E:2403, TOKU-E:3636, Ubigene:YC-C005, Wikidata:Q28335011

ID: CVCL\_0422

Record Creation Time: 20250131T201337+0000

Record Last Update: 20250131T202938+0000

#### **Ratings and Alerts**

No rating or validation information has been found for MDCK.

Warning: Discontinued: ATCC; CRL-6253

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#### Data and Source Information

Source: Cellosaurus

#### **Usage and Citation Metrics**

We found 7633 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.

Wolf L, et al. (2024) PKC regulates ?Klotho gene expression in MDCK and NRK-52E cells. Pflugers Archiv : European journal of physiology, 476(1), 75.

Kwon DI, et al. (2024) Fc-fused IL-7 provides broad antiviral effects against respiratory virus infections through IL-17A-producing pulmonary innate-like T cells. Cell reports. Medicine, 5(1), 101362.

Srinivas K, et al. (2024) Differential Cytotoxic Effects of Cell-Free Supernatants of Emerging Pathogens Escherichia albertii and Escherichia fergusonii on Four Cell Lines Reveal Vero Cells as a Putative Candidate for Cytotoxicity Analysis. Microorganisms, 12(11).

Ding W, et al. (2024) AMG487 alleviates influenza A (H1N1) virus-induced pulmonary inflammation through decreasing IFN-?-producing lymphocytes and IFN-? concentrations. British journal of pharmacology, 181(13), 2053.

Sundaram B, et al. (2024) NLRC5 senses NAD+ depletion, forming a PANoptosome and driving PANoptosis and inflammation. Cell, 187(15), 4061.

Narayanan A, et al. (2024) A novel ITGB8 transcript variant sustains ovarian cancer cell survival through genomic instability and altered ploidy on a mutant p53 background. Journal of ovarian research, 17(1), 218.

Hall ET, et al. (2024) Cytoneme signaling provides essential contributions to mammalian tissue patterning. Cell, 187(2), 276.

Clark JJ, et al. (2024) Protective effect and molecular mechanisms of human nonneutralizing cross-reactive spike antibodies elicited by SARS-CoV-2 mRNA vaccination. Cell reports, 43(11), 114922.

Tian S, et al. (2024) Design, performance, processing, and validation of a pooled CRISPR perturbation screen for bacterial toxins. Nature protocols.

Cho Y, et al. (2024) A sustained calcium response mediated by IP3 receptor anchoring to the desmosome is essential for apoptotic cell elimination. Current biology : CB, 34(20), 4835.

Thompson AJ, et al. (2024) Evolution of human H3N2 influenza virus receptor specificity has substantially expanded the receptor-binding domain site. Cell host & microbe, 32(2), 261.

Liu W, et al. (2024) E3 ubiquitin ligase ANKIB1 attenuates antiviral immune responses by promoting K48-linked polyubiquitination of MAVS. Cell reports, 43(9), 114687.

Xu H, et al. (2024) A Prime-Boost Vaccination Approach Induces Lung Resident Memory CD8+ T Cells Derived from Central Memory T Cells That Prevent Tumor Lung Metastasis. Cancer research, 84(19), 3173.

Gao Y, et al. (2024) Ehbp1 orchestrates orderly sorting of Wnt/Wingless to the basolateral and apical cell membranes. EMBO reports, 25(11), 5053.

Cammarota C, et al. (2024) The mechanical influence of densification on epithelial architecture. PLoS computational biology, 20(4), e1012001.

Hinke DM, et al. (2024) Applying valency-based immuno-selection to generate broadly cross-reactive antibodies against influenza hemagglutinins. Nature communications, 15(1), 850.

Hulin-Curtis S, et al. (2024) A targeted single mutation in influenza A virus universal epitope transforms immunogenicity and protective immunity via CD4+ T cell activation. Cell reports, 43(6), 114259.

Yuan L, et al. (2024) A broad-spectrum multiepitope vaccine against seasonal influenza A and B viruses in mice. EBioMedicine, 106, 105269.

Mommert-Tripon M, et al. (2024) Advancing respiratory virus diagnostics: integrating the nasal IFN-I score for improved viral detection. EBioMedicine, 110, 105450.

Ray R, et al. (2024) Eliciting a single amino acid change by vaccination generates antibody protection against group 1 and group 2 influenza A viruses. Immunity, 57(5), 1141.