

Resource Summary Report

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MDBK

RRID:CVCL_0421

Type: Cell Line

Proper Citation

CLS Cat# 600396, RRID:CVCL_0421

Cell Line Information

URL: https://web.expasy.org/cellosaurus/CVCL_0421

Proper Citation: CLS Cat# 600396, RRID:CVCL_0421

Description: Cell line MDBK is a Spontaneously immortalized cell line with a species of origin *Bos taurus* (Bovine)

Sex: Male

Defining Citation: [PMID:2580922](#), [PMID:5587551](#), [PMID:5988125](#), [PMID:13567776](#), [PMID:14207851](#), [PMID:17900332](#), [PMID:19941903](#), [PMID:24973239](#), [PMID:25565633](#)

Comments: Virology: Not susceptible to infection by wild-type and vaccinal strains of myxoma virus (MYXV) (PubMed=17900332)., Part of: Naval Biosciences Laboratory (NBL) collection (transferred to ATCC in 1982).

Category: Spontaneously immortalized cell line

Organism: *Bos taurus* (Bovine)

Name: MDBK

Synonyms: MDBK (NBL-1), NBL-1, Madin-Darby Bovine Kidney, Madin Darby Bovine Kidney

Cross References: BTO:BTO_0000836, CLO:CLO_0007642, CLO:CLO_0007643, CLO:CLO_0050865, MCCL:MCC:0000318, CLDB:cl3412, CLDB:cl3413, CLDB:cl3414, CLDB:cl3415, CLDB:cl3416, ATCC:CCL-22, ATCC:CRL-6071, BCRC:60126, BCRJ:0167, CCLV:CCLV-RIE 0084, CCLV:CCLV-RIE 0261, CCRID:1101BOV-PUMC000288, CCRID:1102BOV-NIFDC00076, CCRID:3101BOVGNO7, CCRID:5301BOV-KCB90031YJ, CCTCC:GDC0108, CCTCC:GDC0290, CLS:600396, DSMZ:ACC-174, DSMZCellDive:ACC-174, ECACC:90050801, FCS-free:40-4-47-1-8-6, IZSLER:BS CL 63, JCRB:IFO50014, JCRB:JCRB9028, KCB:KCB 90031YJ, KCLB:10022, Lonza:925,

NCBI_Iran:C500, RCB:RCB0180, Wikidata:Q54904675

ID: CVCL_0421

Vendor: CLS

Catalog Number: 600396

Record Creation Time: 20220624T071014+0000

Record Last Update: 20260913T010556+0000

Ratings and Alerts

No rating or validation information has been found for MDBK.

Warning: Discontinued: ATCC; CRL-6071

Virology: Not susceptible to infection by wild-type and vaccinal strains of myxoma virus (MYXV) (PubMed=17900332)., Part of: Naval Biosciences Laboratory (NBL) collection (transferred to ATCC in 1982).

Data and Source Information

Source: [CelloSaurus](#)

Usage and Citation Metrics

We found 343 mentions in open access literature.

Listed below are recent publications. The full list is available at [dkNET](#) .

El-Nady HH, et al. (2026) Epidemiological Study and Molecular Characterization of Lumpy Skin Disease in Cattle in Egypt. Veterinary medicine international, 2026, 2835566.

Larska M, et al. (2026) First detection of two novel malignant catarrhal fever-related gammaherpesviruses associated with sudden deaths of dorcas gazelles (Gazella Dorcas osiris). BMC veterinary research, 22(1).

Di Lorenzo A, et al. (2026) Inducing Antigen-Specific and Functional Immune Responses in Mice Toward Bovine Herpesvirus 1 and Bovine Respiratory Syncytial Virus by Chimeric Peptides Delivered by Bovine Herpesvirus 4-Based Vector. Immunology, 179(1), 54.

Hou P, et al. (2026) PBLD Orchestrates the STING-Mediated Antiviral Immune Response and Autoimmune Diseases. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 13(4), e14512.

Testa L, et al. (2026) Immunogenicity of an Inactivated DIVA Lumpy Skin Disease Virus Vaccine in Guinea Pigs and Lactating Cows, and Its Effects on Cow Lactation. Vaccines, 14(5).

Job V, et al. (2025) Development of high-throughput screening viral titration assay: Proof of concept through two surrogate viruses of human pathogens. *Biology methods & protocols*, 10(1), bpaf049.

Wu X, et al. (2025) Development of a neutralization assay and bioluminescent imaging mouse model for Dehong virus (DEHV) using a pseudovirus system. *Microbiology spectrum*, 13(5), e0155724.

Bosco A, et al. (2025) A novel in vitro repellent bioassay to evaluate the effect of wood vinegar against louse *Haematopinus tuberculatus*. *Parasitology*, 1.

Shin SU, et al. (2023) Non-cytopathic bovine viral diarrhoea virus 2 induces autophagy to enhance its replication. *Veterinary medicine and science*, 9(1), 405.

W??hnke E, et al. (2023) Mass-Spectrometric Evaluation of the African Swine Fever Virus-Induced Host Shutoff Using Dynamic Stable Isotope Labeling with Amino Acids in Cell Culture (SILAC). *Viruses*, 15(6).

Lo YT, et al. (2023) Immunogenicity of a secreted, C-terminally truncated, form of bovine viral diarrhoea virus E2 glycoprotein as a potential candidate in subunit vaccine development. *Scientific reports*, 13(1), 296.

Li Q, et al. (2023) Pathogenicity of a novel bovine adenovirus type 3 with a natural deletion partial fiber gene in BALB/c mice. *Frontiers in veterinary science*, 10, 1138159.

Burrell A, et al. (2023) Refractile bodies of *Eimeria tenella* are proteinaceous membrane-less organelles that undergo dynamic changes during infection. *Frontiers in cellular and infection microbiology*, 13, 1082622.

Wolff J, et al. (2023) Cross-Protection of an Inactivated and a Live-Attenuated Lumpy Skin Disease Virus Vaccine against Sheepox Virus Infections in Sheep. *Vaccines*, 11(4).

Zhang L, et al. (2023) Ethyl Gallate Inhibits Bovine Viral Diarrhoea Virus by Promoting IFITM3 Expression, Lysosomal Acidification and Protease Activity. *International journal of molecular sciences*, 24(10).

Kalaiyarasu S, et al. (2023) Whole-Genome-Sequence-Based Evolutionary Analyses of HoBi-like Pestiviruses Reveal Insights into Their Origin and Evolutionary History. *Viruses*, 15(3).

Chen N, et al. (2023) Anti-BVDV Activity of Traditional Chinese Medicine Monomers Targeting NS5B (RNA-Dependent RNA Polymerase) In Vitro and In Vivo. *Molecules (Basel, Switzerland)*, 28(8).

Flies AS, et al. (2023) Wildlife nidoviruses: biology, epidemiology, and disease associations of selected nidoviruses of mammals and reptiles. *mBio*, 14(4), e0071523.

Wang J, et al. (2023) Effects of Spatial Expression of Activating Transcription Factor 4 on the Pathogenicity of Two Phenotypes of Bovine Viral Diarrhoea Virus by Regulating the Endoplasmic Reticulum-Mediated Autophagy Process. *Microbiology spectrum*, 11(2), e0422522.

Luo Y, et al. (2023) Molecular Epidemiology of Bovine Enteroviruses and Genome Characterization of Two Novel Bovine Enterovirus Strains in Guangxi, China. *Microbiology spectrum*, 11(2), e0378522.