

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: 20260802T004220+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 338 mentions in open access literature.

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

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).

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.

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

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 Sheeppox Virus Infections in Sheep. *Vaccines*, 11(4).

Zhang L, et al. (2023) Ethyl Gallate Inhibits Bovine Viral Diarrhea 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).

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.

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

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

Rodriguez A, et al. (2023) Development and validation of a pentaplex assay for the identification of antibodies against common viral diseases in cattle. *Access microbiology*, 5(10).

Lion J, et al. (2022) Development and assessment of a new bioassay for accurate quantification of Type I interferons induced by bovine respiratory viruses. *Journal of immunological methods*, 504, 113256.

Ding X, et al. (2022) β -Catenin-Specific Inhibitor, iCRT14, Promotes BoHV-1 Infection-Induced DNA Damage in Human A549 Lung Adenocarcinoma Cells by Enhancing Viral Protein Expression. *International journal of molecular sciences*, 23(4).

Craig N, et al. (2022) Direct Lysis RT-qPCR of SARS-CoV-2 in Cell Culture Supernatant Allows for Fast and Accurate Quantification. *Viruses*, 14(3).

Keck H, et al. (2022) Comparison of Biosafety and Diagnostic Utility of Biosample Collection Cards. *Viruses*, 14(11).