



# Bovine viral diarrhea virus 1

VR-1422™

## Description

**Strain designation:** NADL (biologically cloned)

**Common name:** Bovine viral diarrhea virus 1

**Deposited As:** Bovine viral diarrhea

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## Storage Conditions

**Product format:** Frozen

**Storage conditions:** -70°C or colder

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## Intended Use

This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use.

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## BSL 2

ATCC determines the biosafety level of a material based on our risk assessment as guided by the current edition of *Biosafety in Microbiological and Biomedical Laboratories (BMBL)*, U.S. Department of Health and Human Services. It is your responsibility to understand the hazards associated with the material per your organization's policies and procedures as well as any other applicable regulations as enforced by your local or national agencies.

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ATCC highly recommends that appropriate personal protective equipment is always used when handling vials. For cultures that require storage in liquid nitrogen, it is important to note that some vials may leak when submerged in liquid nitrogen and will slowly fill with liquid nitrogen. Upon thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vial exploding or blowing off its cap with dangerous force creating flying debris. Unless necessary, ATCC recommends that these cultures be stored in the vapor phase of liquid nitrogen rather than submerged in liquid nitrogen.

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## Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at [www.atcc.org](http://www.atcc.org).

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## Growth Conditions

**Host:** BT (ATCC CRL-1390)

Host Range: cattle, rabbits, sheep, swine

**Effects:** CPE; cytoplasmic vacuolation

**Complete medium:**

EMEM (ATCC<sup>®</sup> 30-2003™) + 10% Horse Serum (ATCC<sup>®</sup> 30-2041™)

**Temperature:** 37°C

**Atmosphere:** 95% Air, 5% CO<sub>2</sub>

**Recommendations for infection:** For best results cells should be 24 to 48 hours old and 80%-90% confluent (not 100% confluent).

**Incubation:** 2 to 6 days at 37°C, a 5% CO<sub>2</sub> in air atmosphere is recommended.

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## Handling Procedures

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**Mycoplasma contamination:** Not detected

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## Notes

This high titer strain is the same as ATCC® VR-534™ (NADL strain) except for passage history and its amenability to be grown to high titer.

**Key Abbreviations:** bp, Base pairs; BT, Bovine turbinate cells; BVD, Bovine viral diarrhea; BVDV, Bovine viral diarrhea virus; CO<sub>2</sub>, Carbon dioxide; CPE, Cytopathic effect; EMEM, Eagle's Minimum Essential Medium; FA, Fluorescent antibody assay; FBS, Fetal bovine serum; μM, Micromolar; NADL, National Animal Disease Laboratory; NCBI, National Center for Biotechnology Information; PCR, Polymerase chain reaction; Pen, Penicillin; RT-PCR, reverse-transcriptase polymerase chain reaction; Strep, Streptomycin; TC, Tissue culture; TCID<sub>50</sub>, Median tissue culture infective dose; VMRD, Veterinary Medical Research and Development

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## Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: Bovine viral diarrhea virus 1 (ATCC VR-1422)

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## References

References and other information relating to this material are available at [www.atcc.org](http://www.atcc.org).

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