



# Canine coronavirus

VR-3389™

## Description

This product is an ATCC manufactured and accessioned progeny of VR-2068 cited in US Pat. No. 4,567,042.

**Strain designation:** CCV-TN449

**Common name:** CCV

**Deposited As:** ATCC accessioned progeny of Canine coronavirus strain CCV-TN449 cited in US Pat. No. 4,567,042 as VR-2068.

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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.

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 submersed 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 submersed 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:** CRFK (ATCC CCL-94)

**Effects:** CPE; syncytia

**Complete medium:** EMEM (ATCC 30-2003) + 1.0 µg/mL Gibco Trypsin (1:250) Powder (Thermo Fisher Scientific Cat. # 27250-018)

**Temperature:** 35-38°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:** 1 to 4 days at 37°C, rocking at setting #1, 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

TN-449 is an attenuated strain of canine coronavirus cited in U.S. Patents 5,047,238 and 5,012,663 as efficacious when administered parenterally to dogs as a live or inactivated vaccine.

**Key Abbreviations:** CO<sub>2</sub>, Carbon dioxide; CPE, Cytopathic effect; CRFK, Crandell feline kidney cells; EMEM, Eagle's Minimum Essential Medium; FA, Fluorescent antibody assay; µg, Microgram; mL, Milliliter; TC, Tissue culture; TCID<sub>50</sub>, Median tissue culture infective dose; U.S., United States of America; 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: Canine coronavirus (ATCC VR-3389)

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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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### Warranty

The product is provided 'AS IS' and the viability of ATCC® products is warranted for 30 days from the date of shipment, provided that the customer has stored and handled the product according to the information included on the product information sheet, website, and Certificate of Analysis. For living cultures, ATCC lists the media formulation and reagents that have been found to be effective for the product. While other unspecified media and reagents may also produce satisfactory results, a

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