

Recombinant Murine Coronavirus, JHM.SD (Wild Type)

Catalog No. NR-53718

For research use only. Not for use in humans.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Virus Classification: *Coronaviridae, Betacoronavirus*

Species: Murine coronavirus [formerly murine hepatitis virus (MHV)]

Isolate: JHM.SD (also referred to as JHM and MHV-4)¹

Original Source: Murine coronavirus, JHM.SD is a recombinant virus derived from MHV, JHM, a naturally occurring neurotropic virus.^{1,2,3}

Comments: Wild-type recombinant JHM (rJHM) is phenotypically indistinguishable from the parental wild type.¹ The complete genome of MHV, JHM has been sequenced (GenBank: [AC_000192](https://www.ncbi.nlm.nih.gov/nuccore/AC_000192)).

Material Provided:

Each vial contains approximately 1.0 mL of cell lysate and supernatant from murine 17Cl-1 cells infected with recombinant murine coronavirus, JHM.SD.

Note: If homogeneity is required for your intended use, please purify prior to initiating work.

Packaging/Storage:

NR-53718 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

Growth Conditions:

Host: Murine 17Cl-1 cells (BEI Resources NR-53719)

Growth Medium: Dulbecco's Modified Eagle's Medium (DMEM) modified to contain 4 mM L-glutamine, 4500 mg per L glucose, 1 mM sodium pyruvate and 1500 mg per L sodium bicarbonate supplemented with 2% fetal bovine serum or equivalent

Infection: Cells should be 70% to 80% confluent

Incubation: 1 to 4 days at 37°C and 5% CO₂

Cytopathic Effect: Cell rounding and sloughing

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH:

Recombinant Murine Coronavirus, JHM.SD (Wild Type), NR-53718."

Biosafety Level: 2

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

1. Cowley, T. J., S. Y. Long and S. R. Weiss. "The Murine Coronavirus Nucleocapsid Gene is a Determinant of Virulence." *J. Virol.* 84 (2010): 1752-1763. PubMed: 20007284.
2. Weiss, S. R., Personal Communication.
3. Zhang, R., et al. "The nsp1, nsp13 and M Proteins Contribute to the Hepatotropism of Murine Coronavirus JHM.WU." *J. Virol.* 89 (2015): 3598-3609. PubMed: 25589656.

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