

Middle East Respiratory Syndrome Coronavirus, Florida/USA-2_Saudi Arabia_2014

Catalog No. NR-50415

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Contributor:

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Manufacturer:

BEI Resources

Product Description:

Virus Classification: *Nodovirales*, *Coronaviridae*, *Coronavirinae*, *Betacoronavirus*

Agent: Middle East respiratory syndrome coronavirus (MERS-CoV)

Strain/Isolate: Florida/USA-2_Saudi Arabia_2014

Original Source: MERS-CoV, Florida/USA-2_Saudi Arabia_2014, was isolated on May 10, 2014 from a human who had travelled to Florida, USA from Saudi Arabia¹⁻³

Comments: The complete genomic sequence of MERS-CoV, Florida/USA-2_Saudi Arabia_2014 has been determined (GenBank: KJ829365; KP223131)^{2,3}

Material Provided:

Each vial contains approximately 1 mL of cell lysate and supernatant from *Cercopithecus aethiops* kidney epithelial cells (Vero: ATCC® CCL-81™) infected with MERS-CoV, Florida/USA-2_Saudi Arabia_2014.

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

Packaging/Storage:

NR-50415 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: Vero cells; ATCC® CCL-81™

Growth Medium: Dulbecco's Modified Eagle's Medium containing 4 mM L-glutamine, 1 mM sodium pyruvate, 4.5 g per L L-glucose and 1.5 g per L sodium bicarbonate, supplemented with 5% fetal bovine serum, or equivalent

Infection: Cells should be approximately 80% confluent

Incubation: 3 to 5 days at 37°C and 5% CO₂

Cytopathic Effect: Refractile cell rounding, clumping, and detachment

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Middle East Respiratory Syndrome Coronavirus, Florida/USA-2_Saudi Arabia_2014, NR-50415."

Biosafety Level: 3

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. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmb15/index.htm.

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References:

1. Bialek, S. R., et al. "First Confirmed Cases of Middle East Respiratory Syndrome Coronavirus (MERS-CoV) Infection in the United States, Updated Information on the Epidemiology of MERS-CoV Infection, and Guidance for the Public, Clinicians, and Public Health Authorities – May 2014." *MMWR Morb. Mortal. Wkly. Rep.* 63 (2014): 431-436. PubMed: 24827411.
2. Tao, Y., et al. Division of Viral Diseases, Centers for Disease Control and Prevention, 1600 Clifton Road, Atlanta, Georgia 30333, USA. 14 MAY 2014. Direct Submission.
3. Tao, Y., et al. Division of Viral Diseases, Centers for Disease Control and Prevention, 1600 Clifton Road, Atlanta, Georgia 30333, USA. 01 DEC 2014. Direct Submission.

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