

Middle East Respiratory Syndrome Coronavirus (MERS-CoV), EMC/2012

Catalog No. NR-44260

For research use only. Not for human use.

Contributor:

Ron A. M. Fouchier, Ph.D. and Bart L. Haagmans, Ph.D., Viroscience Lab, Erasmus Medical Center, Rotterdam, the Netherlands

Manufacturer:

BEI Resources

Product Description:

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

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

Strain/Isolate: EMC/2012

Original Source: MERS-CoV, EMC/2012 was isolated in 2012 from an elderly man with fatal pneumonia in Saudi Arabia.¹

Comments: The complete genome of MERS-CoV, EMC/2012 has been sequenced (GenBank: [JX869059](https://www.ncbi.nlm.nih.gov/nuccore/JX869059)).²

Material Provided:

Each vial contains approximately 1 mL of cell lysate and supernatant from *Cercopithecus aethiops* kidney epithelial cells infected with MERS-CoV, EMC/2012.

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

Packaging/Storage:

NR-44260 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: *Cercopithecus aethiops* kidney epithelial cells (Vero 76, clone E6; ATCC® CRL-1586™ or equivalent)

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 10% 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 (MERS-CoV), EMC/2012, NR-44260."

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. Zaki, A. M., et al. "Isolation of a Novel Coronavirus from a Man with Pneumonia in Saudi Arabia." N. Engl. J. Med. 367 (2012): 1814-1820. PubMed: 23075143.
2. van Boheemen, S., et al. "Genomic Characterization of a Newly Discovered Coronavirus Associated with Acute Respiratory Distress Syndrome in Humans." mBio 3 (2012): e00473-12. PubMed: 23170002.

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