

**Middle East Respiratory Syndrome Coronavirus, EMC/2012, Recombinant Infectious Clone [icMERS-CoV (WT)]**

**Catalog No. NR-48811**

**For research use only. Not for use in humans.**

**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: Recombinant infectious clone of wild type EMC/2012 [icMERS-CoV (WT)]<sup>1,2</sup>

NR-48811 is a recombinant human group 2c betacoronavirus assembled from the MERS-CoV, EMC/2012 genomic sequence.<sup>1,2</sup>

**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 icMERS-CoV (WT).

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

**Packaging/Storage:**

NR-48811 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: Eagle's Minimum Essential Medium containing Earle's Balanced Salt Solution, non-essential amino acids, 2 mM L-glutamine, 1 mM sodium pyruvate and 1.5 g per L sodium bicarbonate supplemented with 2% fetal bovine serum, or equivalent

Infection: Cells should be 80% to 90% confluent

Incubation: 3 to 4 days at 37°C and 5% CO<sub>2</sub>

Cytopathic Effect: Refractile cell rounding and detachment, with some syncytia formation

**Citation:**

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

Middle East Respiratory Syndrome Coronavirus, EMC/2012, Recombinant Infectious Clone [icMERS-CoV (WT)], NR-48811."

**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. 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see [www.cdc.gov/biosafety/publications/bmb15/index.htm](http://www.cdc.gov/biosafety/publications/bmb15/index.htm).

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**References:**

1. Baric, R. S., Personal Communication.
2. Scobey, T., et al. "Reverse Genetics with a Full-Length Infectious cDNA of the Middle East Respiratory Syndrome Coronavirus." *Proc. Natl. Acad. Sci. USA* 110 (2013): e5. PubMed: 24043791.

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