

Enterovirus D68, US/KY/14-18953

Catalog No. NR-49132

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Contributor:

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Manufacturer:

BEI Resources (Lot 63264124 was manufactured by CDC Division of Viral Diseases)

Product Description:

Virus Classification: *Picornaviridae, Enterovirus*

Species: Enterovirus D

Type: D68

Strain/Isolate: US/KY/14-18953

Original Source: Enterovirus D68 (EV-D68), US/KY/14-18953 was isolated from a nasopharyngeal swab taken from a human in Kentucky, USA, in August 2014.¹

Comments: The complete genome of EV-D68, US/KY/14-18953 has been sequenced (GenBank: [KM851231](#)).

EV-D68 was first identified in California in 1962 from cases of bronchiolitis and pneumonia and was subsequently rarely reported in the United States until 2009. Clusters of severe respiratory disease were reported to the Centers for Disease Control and Prevention beginning in August 2014. EV-D68 was identified from a high percentage of initial cases, and severe EV-D68 infections became widespread across the United States in August and September. EV-D68, US/KY/14-18953 is representative of one of several co-circulating EV-D68 strains that have been identified in the 2014 severe respiratory disease outbreak.¹

Material Provided:

Each vial contains approximately 1 mL of cell lysate and supernatant from human rhabdomyosarcoma cells infected with EV-D68, US/KY/14-18953. Each vial of lot 63264124 contains approximately 0.5 mL of cell lysate and supernatant from human rhabdomyosarcoma cells infected with EV-D68, US/KY/14-18953.

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

Packaging/Storage:

NR-49132 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: Human rhabdomyosarcoma cells (RD; ATCC® CCL-136™)

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/L of sodium bicarbonate supplemented with 2% fetal bovine serum, or equivalent

Infection: Cells should be 80% to 95% confluent

Incubation: 4 to 8 days at 33°C and 5% CO₂

Cytopathic Effect: Cell rounding and detachment

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Enterovirus D68, US/KY/14-18953, NR-49132."

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. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

1. Brown, B. A., et al. "Seven Strains of Enterovirus D68 Detected in the United States During the 2014 Severe Respiratory Disease Outbreak." Genome Announc. 2 (2014): e01201-14. PubMed: 25414503.

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