

Enterovirus Species D Type 111, ANG/2010-23294

Catalog No. NR-52318

For research use only. Not for use in humans.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Virus Classification: *Picornaviridae, Enterovirus*

Species: Enterovirus D

Type: D111

Strain/Isolate: ANG/2010-23294

Original Source: Enterovirus species D type 111 (EV-D111), ANG/2010-23294 was isolated in 2010 from a stool sample from a human subject in Angola.¹ The subject was not suffering from acute flaccid myelitis (AFM).¹

Comments: The complete genome of EV-D111, ANG/2010-23294 has been sequenced (GenBank: [MT081371](#)).

Enteroviruses are small non-enveloped viruses whose genome consists of a single strand of positive-sense RNA.² EV-D111s were first identified in Africa in the early 2000s from human stool samples. EV-D111s are currently poorly characterized. One EV-D111 has been detected in the stool of wild non-human primates, suggesting EV-D111s might be zoonotic viruses. They are resistant to acid pH and it is therefore believed that enteric replication occurs. EV-D111s are known only through partial sequences. So far, EV-D111 viruses have been observed only in Africa.²

Material Provided:

Each vial contains approximately 1 mL of cell lysate and supernatant from rhabdomyosarcoma cells infected with EV-D111, ANG/2010-23294.

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

Packaging/Storage:

NR-52318 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: Rhabdomyosarcoma cells (RD; ATCC® CCL-136™)

Growth Medium: Dulbecco's Modified Eagle's Medium modified to contain 4 mM L-glutamine, 4500 mg per L glucose, 1 mM sodium pyruvate and 1500 mg per L of

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

Infection: Cells should be approximately 80 to 90% confluent
Incubation: 5 to 10 days at 37°C and 5% CO₂

Cytopathic Effect: Cell rounding and sloughing

Citation:

Acknowledgment for publications should read "The following reagent was contributed by Division of Viral Diseases, Centers for Disease Control and Prevention for distribution through BEI Resources, NIAID, NIH: Enterovirus Species D Type 111, ANG/2010-23294, NR-52318."

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/bmb15/index.htm.

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References:

1. Nix, W. A., Personal Communication.
2. Sadeuh-Mba, S. A., et al. "Genetic and Phenotypic Characterization of Recently Discovered Enterovirus D Type 111." PLoS Negl. Trop. Dis. 13 (2019): e0007797. PubMed: 31622358.

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