Yellow Fever Virus (YFV), 17D

Catalog No. NR-115
Derived from ATCC® VR-1268

For research use only. Not for human use.

Contributor:
ATCC®

Product Description:
Virus Classification: Flaviviridae, Flavivirus
Agent: Yellow fever virus (YFV)
Strain/Isolate: 17D
Source: Derived from the virulent Asibi strain of YFV by in vitro passage in chicken embryo tissue. The Asibi strain was isolated in 1927 by inoculating rhesus macaques with the blood of a Ghanaian patient.

Comments: NR-115 was derived from ATCC® VR-1268 (Lot V-525-001-022, NIAID). V-525-001-022 is a frozen lot of the same virus as the lyophilized lot, V-525-001-522 (NIAID), which is indicated on the vial label. The complete genome of YFV, 17D vaccine strain has been sequenced (GenBank: X03700).²

YFV is a mosquito-borne virus which circulates in natural transmission cycles between mosquitoes and temporary amplifiers, humans and monkeys. Yellow fever (YF) is endemic in tropical regions of Africa and South America and poses a serious health risk to travelers to these areas.³,⁴ Vector-control strategies that were once successful for elimination of YFV from many regions have faltered, leading to reemergence of the disease.⁵ Currently, there is no effective drug treatment for YF; however, live-attenuated 17D YF vaccines have demonstrated high rates of effectiveness and good safety profiles.⁶⁻⁹

Material Provided:
Each vial contains approximately 1 mL of cell lysate and supernatant from African green monkey kidney cells (Vero; ATCC® CCL-81™) infected with YFV, 17D.

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

Packaging/Storage:
NR-115 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. Freez-thaw cycles should be avoided.

Growth Conditions:
Host: Vero cells (ATCC® CCL-81™)
Growth Medium: Minimum Essential Medium supplemented with 2% irradiated fetal bovine serum, or equivalent (lot-specific details are on the Certificate of Analysis)

Infection: Cells should be 80–90% confluent (not 100% confluent)
Incubation: 7 to 10 days at 37°C and 5% CO₂
Cytopathic Effect: Cell rounding and cell lysis

Citation:
Acknowledgment for publications should read “The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Yellow Fever Virus (YFV), 17D, NR-115.”

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, 2007; see "www.cdc.gov/od/biosafety/bmbl5/bmbl5toc.htm.” This publication recommends vaccination for all personnel who work with YFV or infected animals, and those entering rooms where YFV or infected animals are present.

Disclaimers:
You are authorized to use this product for research use only. It is not intended for human use.

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References:

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