

Vector pCAGGS Containing the Zaire Ebola virus, Mayinga VP24 Gene with N-Terminal FLAG Tag

Catalog No. NR-49202

For research use only. Not for human use.

Contributor and Manufacturer:

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Product Description:

The VP24 membrane-associated protein gene from Zaire ebolavirus (EBOV), Mayinga (GenBank: AF086833) was directionally subcloned into a modified pCAGGS mammalian expression vector.¹ The resulting plasmid encodes a recombinant EBOV VP24 containing a FLAG-tag (DYKDDDDK) and three additional alanine residues at the amino terminus. The plasmid was produced in *Escherichia coli* and extracted.

VP24 localizes to both the plasma membrane and the perinuclear region in EBOV-infected cells, and is required for assembly of the nucleocapsid.² It is also an antagonist of both α/β and γ interferons (IFN), blocking IFN signaling by preventing the nuclear accumulation of tyrosine-phosphorylated STAT1.³

NR-49202 has been qualified for use in bacterial transformations.

Material Provided:

Each vial contains approximately 50 μ L of plasmid DNA. The DNA concentration and content are shown on the Certificate of Analysis. The vial should be centrifuged prior to opening.

Packaging/Storage:

NR-49202 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen on dry ice and should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be minimized.

Citation:

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Vector pCAGGS Containing the Zaire Ebola virus, Mayinga VP24 Gene with N-Terminal FLAG Tag, NR-49202.”

Biosafety Level: 1

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. Basler, C. F., Personal Communication.
2. Jasenosky, L. D., and Y. Kawoaka. “Filovirus Budding.” Virus Res, 106 (2004): 181-188. PubMed: 15567496.
3. Xu, W., et al. “Ebola Virus VP24 Targets a Unique NLS Binding Site on Karyopherin Alpha 5 to Selectively Compete with Nuclear Import of Phosphorylated STAT1.” Cell Host Microbe, 16 (2014): 187-200. PubMed: 25121748.

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