

## Vector pCAGGS Containing the Mouse-Adapted Zaire Ebolavirus, Mayinga VP24 Gene with N-Terminal HA Tag

Catalog No. NR-49205

**For research use only. Not for human use.**

### Contributor and Manufacturer:

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### Product Description:

The VP24 membrane-associated protein gene from a mouse-adapted variant<sup>1</sup> of Zaire ebolavirus (EBOV), Mayinga (GenBank: AF499101) was directionally subcloned into a modified pCAGGS mammalian expression vector.<sup>2</sup> The resulting plasmid encodes a recombinant EBOV VP24 containing an HA tag (YPYDVPDYA) 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.<sup>3</sup> It is also an antagonist of both  $\alpha/\beta$  and  $\gamma$  interferons (IFN), blocking IFN signaling by preventing the nuclear accumulation of tyrosine-phosphorylated STAT1.<sup>4</sup>

NR-49205 has been qualified for use in bacterial transformations.

### Material Provided:

Each vial contains approximately 50  $\mu$ 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-49205 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 Mouse-Adapted Zaire Ebolavirus, Mayinga VP24 Gene with N-Terminal HA Tag, NR-49205."

### 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](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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### References:

1. Bray, M., et al. "A Mouse Model for Evaluation of Prophylaxis and Therapy of Ebola Hemorrhagic Fever." *J. Infect. Dis.* 178 (1998): 651-661. PubMed: 9728532.
2. Basler, C. F., Personal Communication.
3. Jasenosky, L. D., and Y. Kawoaka. "Filovirus Budding." *Virus Res.* 106 (2004): 181-188. PubMed: 15567496.
4. 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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