

## Vector pCAGGS Containing the Marburg Marburgvirus, Musoke VP40 Gene with N-Terminal HA Tag

Catalog No. NR-49351

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

### Contributor and Manufacturer:

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### Product Description:

The VP40 matrix protein gene from Marburg marburgvirus (MARV), Musoke (GenBank: DQ217792) was directionally subcloned into a modified pCAGGS mammalian expression vector.<sup>1</sup> The resulting plasmid encodes a recombinant MARV VP40 containing an HA tag (YPYDVPDYA) and three additional alanine residues at the amino terminus. The plasmid was produced in *Escherichia coli* and extracted.

VP40 is tightly associated with the inner leaflet of the virion membrane and drives filovirus budding.<sup>2</sup> Cells expressing both VP40 and a filovirus glycoprotein produce virus-like particles. MARV VP40 inhibits the interferon-induced phosphorylation of Jak and STAT proteins.<sup>3</sup>

NR-49351 has been qualified for use in bacterial transformations.

### Material Provided:

Each vial contains approximately 50 µL 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-49351 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 Marburg Marburgvirus, Musoke VP40 Gene with N-Terminal HA Tag, NR-49351."

### 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. Basler, C. F., Personal Communication.
2. Jasenosky, L. D., and Y. Kawoaka. "Filovirus Budding." *Virus Res.* 106 (2004): 181-188. PubMed: 15567496.
3. Ramanan, P., et al. "Filoviral Immune Evasion Mechanisms." *Viruses* 3 (2011): 1634-1649. PubMed: 21994800.

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