

**Plasmid Containing H4 Hemagglutinin (HA) Gene from Influenza A Virus, A/mallard/Netherlands/1/1999 (H4N6)**

**Catalog No. NR-28996**

This reagent is the tangible property of the U.S. Government.

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

**Contributor:**

Ron A. M. Fouchier, Ph.D., Professor, Department of Virology, Erasmus Medical Center, Rotterdam, The Netherlands, provided under government contract

**Manufacturer:**

BEI Resources

**Product Description:**

The H4 hemagglutinin (HA) gene from influenza A virus, A/mallard/Netherlands/1/1999 (H4N6), was cloned into a modified version of the bidirectional reverse genetics plasmid, pHW2000. The resulting plasmid, NR-28996, may be used to rescue recombinant viruses with reverse genetics techniques or to express the HA protein by transfection.<sup>1,2</sup> The plasmid was produced in *Escherichia coli* Stbl2™ cells (Invitrogen™) and extracted using a QIAGEN® EndoFree® Plasmid Maxi Kit.

**Material Provided:**

Each vial contains approximately 100 µL of plasmid DNA in TE buffer (pH 7.0). The DNA concentration and content are shown on the Certificate of Analysis.

**Packaging/Storage:**

NR-28996 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: Plasmid Containing H4 Hemagglutinin (HA) Gene from Influenza A Virus, A/mallard/Netherlands/1/1999 (H4N6), NR-28996.”

**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. Keawcharoen, J., et al. “Repository of Eurasian Influenza A Virus Hemagglutinin and Neuraminidase Reverse Genetics Vectors and Recombinant Viruses.” *Vaccine* 28 (2010): 5803-5809. PubMed: 20600474.
2. Hoffman, E., et al. “A DNA Transfection System for Generation of Influenza A Virus from Eight Plasmids.” *Proc. Natl. Acad. Sci. USA* 97 (2000): 6108-6113. PubMed: 10801978.

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