

Hemagglutinin (HA) Protein from Influenza Virus, B/Malaysia/2506/2004, Recombinant from Baculovirus

Catalog No. NR-51162

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Contributor and Manufacturer:

BEI Resources

Product Description:

A recombinant form of the hemagglutinin (HA) protein from influenza virus B/Malaysia/2506/2004 was produced in Sf9 insect cells using a baculovirus expression vector system and purified by cobalt affinity chromatography.^{1,2} The predicted protein sequence is shown in Table 1. The HA protein includes a C-terminal peptide containing a thrombin cleavage site, trimerizing (foldon) domain and eight histidine residues. The full-length HA precursor protein is 585 residues (GenPept: [AC005957](#)).

Material Provided:

Each vial contains approximately 1 mL of purified recombinant HA protein in 5 mM sodium phosphate buffer, pH 7.0, containing 75 mM sodium chloride and 50% glycerol. The concentration, expressed as µg per mL, is shown on the Certificate of Analysis.

Packaging/Storage:

Purified recombinant HA protein was packaged aseptically, in screw-capped plastic cryovials. This product is provided on blue ice and should be stored at -20°C immediately upon arrival.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Hemagglutinin (HA) Protein from Influenza Virus, B/Malaysia/2506/2004, Recombinant from Baculovirus, NR-51162."

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. Stevens, J., et al. "Structure of the Uncleaved Human H1 Hemagglutinin from the Extinct 1918 Influenza Virus." *Science* 303 (2004): 1866-1870. PubMed: 14764887.
2. Stevens, J., et al. "Structure and Receptor Specificity of the Hemagglutinin from an H5N1 Influenza Virus." *Science* 312 (2006): 404-410. PubMed: 16543414.

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Table 1 – Predicted Protein Sequence

1	ADPGYLLEDR	ICTGITSSNS	PHVKTATQG	EVNVTGVIPL	TTTPTKSHFA
51	NLKGTTETRGK	LCPKCLNCTD	LDVALGRPKC	TGNIPSARVS	ILHEVRPVTS
101	GCFPIMHDRT	KIRQLPNLLR	GYEHIRLSTH	NVINAENAPG	GPYKIGTSGS
151	CPNVTNGNGF	FATMAWAVPK	NDNNKTATNS	LTIEVPYICT	EGEDQITVWG
201	FHSDNEIQMA	KLYGDSKPQK	FTSSANGVTT	HYVSQIGGFP	NQTEDGGLPQ
251	SGRIVVDYMV	QKSGKTGTIT	YQRGILLPQK	VWCASGRSKV	IKGSLPLIGE
301	ADCLHEKYGG	LNKSKPYTGT	EHAKAIGNCP	IWVKTPLKLA	NGTKYRPPAK
351	LLKERGFFGA	IAGFLEGGWE	GMIAGWHGYT	SHGAHGVAVA	ADLKSTQEAI
401	NKITKNLNSL	SELEVKNLQR	LSGAMDELHN	EILELDEKVD	DLRADTISSQ
451	IELAVLLSNE	GIINSEDEHL	LALERKLKKM	LGPSAVEIGN	GCFETKHKCN
501	QTCLDRIAAG	TFDAGEFSLP	TFDSLNTAA	SLNDDGLDNH	TRCRSSGRLV
551	PRGSPGSGYI	PEAPRDGOAY	VRKDGEWVLL	STFLGHHHHH	HHH

Plasmid-derived amino acids – Residues 1 to 8, 542 to 548, 555, 585
 HA protein – **Residues 9 to 541** (represents amino acid residues 16-548 of the B/Malaysia/2506/2004)
 Thrombin cleavage sequence – Residues 549 to 554
 Trimerizing domain – Residues 556 to 584
 His Tag – Residues 586 to 593