Variola Major Virus (Bangladesh-1975) B6R Protein, Recombinant from Baculovirus

Catalog No. NR-10502

For research use only. Not for human use.

Contributor:

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Product Description:

NR-10502 is a recombinant form of the variola major virus (Bangladesh-1975) B6R protein, a homolog of the vaccinia virus (WR) B5R protein.[1] The full-length variola major virus B6R protein contains 317 amino acid residues (GenPept: AAA60915; GenBank: L22579).[2] NR-10502 is a truncated form of B6R, comprising of amino acid residues 20 to 275, and lacking the C-terminal transmembrane domain of the intact protein. NR-10502 was produced by baculovirus infection of *Trichoplusia ni* insect larvae using the proprietary Chesapeake PERL technology, PERLXpress.[4] The protein was purified using standard chromatographic methods. The predicted protein sequence is shown in Table I below.

Material Provided:

Each vial contains approximately 1.2 mg of NR-10502 in 30 mM phosphate buffer (pH 7.6) containing 50 mM KCl, 100 mM NaCl and 0.05% polysorbate (v/v). The concentration, expressed as mg per mL, is shown on the Certificate of Analysis.

Packaging/Storage:

NR-10502 was packaged aseptically in cryovials. The product is provided on dry ice and should be stored at -20°C or colder immediately upon arrival. Repeated freeze-thaw cycles of this product should be avoided.

Functional Activity:

NR-10502 was demonstrated to be functionally active based on its reactivity with a mouse monoclonal antibody to vaccinia virus B5R (VMC-11; provided by G. H. Cohen and R. J. Eisenberg). Monoclonal antibody from the same hybridoma as VMC-11 is available as BEI Resources NR-426.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Variola Major Virus (Bangladesh-1975) B6R Protein, Recombinant from Baculovirus, NR-10502."

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, 2007; see www.cdc.gov/od/ohs/biosfty/bmbl5/bmbl5toc.htm.

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References:

1. http://www.poxvirus.org/gene_detail.asp?gene_id=38934
2. Massung, R. F., et al. "Potential Virulence Determinants in Terminal Regions of Variola Smallpox Virus Genome." Nature 366 (1993): 748-751. PubMed: 8264798.
3. PERLXpress™, Chesapeake Protein Expression and Recovery Labs (PERL).

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Support Provided by NIAID

Table 1 - Predicted Protein Sequence					
1	DPTCTVPTMN	NAKLTSTETS	FNDKQKVTFT	CDSGYYSLDP	NAVCETDKWK
51	YENPCKKMCT	VSDYVSELYN	KPLYEVNAII	TLICKDETKY	FRCEEKNGNT
101	SWNDTVTCPN	AECQSLQLDH	GSCQPVKGKY	SFGEHITINC	DVGYEVIGAS
151	YITCTANSWN	VIPSCQQKCD	IPSLSNGLIS	GSTFSIGGVI	HLSCKSGFIL
201	TGSPSSTCID	GKWNPVLPIC	IRSNEEFDPV	EDGPDDETDL	SKLSKDVVQY
251	EQEIESLE				

The underlined amino acids are not part of the native amino acid sequence.

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