

Variola Major Virus (India-1967) A36R Protein, Recombinant from Baculovirus

Catalog No. NR-10503

For research use only. Not for human use.

Contributor:

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Product Description:

NR-10503 is a recombinant form of the variola major (India-1967) A36R protein, a homolog of the vaccinia virus (WR) A33R protein.¹ The full-length variola major virus A36R protein contains 184 amino acid residues (GenPept: NP_042184; GenBank: X69198).² NR-10503 is a truncated form of A36R, comprising amino acid residues 58-184, and lacking the N-terminal transmembrane domain of the intact protein. NR-10503 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 mg of NR-10503 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-10503 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-10503 was demonstrated to be functionally active based on its reactivity with an anti-variola major virus A36R rabbit polyclonal antibody (R-213 provided by G. H. Cohen and R. J. Eisenberg).

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 (India-1967) A36R Protein, Recombinant from Baculovirus, NR-10503."

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/bmb15/bmb15toc.htm.

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References:

1. http://www.poxvirus.org/gene_detail.asp?gene_id=39305
2. Shchelkunov, S. N., A. V. Totmenin, and L. S. Sandakhchiev. "Analysis of the Nucleotide Sequence of 23.8 kbp from the Left Terminus of the Genome of Variola Major Virus Strain India-1967." Virus Res. 40 (1996): 169-183. PubMed: 8725113.
3. Massung, R. F., et al. "Potential Virulence Determinants in Terminal Regions of Variola Smallpox Virus Genome." Nature 366 (1993): 748-751. PubMed: 8264798.

4. PERLXpress™, Chesapeake Protein Expression and Recovery Labs (PERL).

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1	<u>D</u> PRLNQCMSA	NEAAITDATA	VAAALSTHRK	VASSTTQYKH	QESCNGLYYQ
51	GSCYIFHSDY	QLFSDAKANC	ATESSTLPNK	SDVLTTLWID	YVEDTWGSDG
101	NPITKTTTDY	QSDVSQEV	KYFCVKTMN		

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