

Variola Major Virus (Bangladesh-1975) M1R Protein, Recombinant from Baculovirus

Catalog No. NR-10501

For research use only. Not for human use.

Contributor:

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Product Description:

NR-10501 is a recombinant form of the variola major (Bangladesh-1975) M1R protein, a homolog of the vaccinia virus (WR) L1R protein.¹ The full-length variola major virus M1R protein contains 250 amino acid residues (GenPept: AAA60821; GenBank: L22579).² NR-10501 is a truncated form of M1R, comprising amino acid residues 1-185, and lacking the C-terminal transmembrane domain of the intact protein. NR-10501 was produced by baculovirus infection of *Trichoplusia ni* insect larvae using the proprietary Chesapeake PERL technology, PERLXpress.³ 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-10501 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-10501 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-10501 was demonstrated to be functionally active based on its reactivity with an anti-vaccinia (WR) L1R (residues 1 to 185) mouse monoclonal antibody (VMC-2 provided by G. H. Cohen and R. J. Eisenberg; monoclonal antibody prepared from the same hybridoma as VMC-2 is available as BEI Resources NR-417).

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) M1R Protein, Recombinant from Baculovirus, NR-10501."

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=38838
2. Massung, R. F., et al. "Analysis of the Complete Genome of Smallpox Variola Major Virus Strain Bangladesh-1975." *Virology* 201 (1994): 215-240. PubMed: 8184534. GenBank: L22579.

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

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1	MGAAASIQTT	VNLSERISS	KLEQEANASA	QTKCDIEIGN	FYIRQNHGCM
51	LTVKNMCSAD	ADAQLDAVLS	AATETYSGLT	PEQKAYVPAM	FTAALNIQTS
101	VNTVVRDFEN	YVKQTCNSSA	VVDNKLKIQN	VIIDECYGAP	GSPTNLEFIN
151	TGSSKGNCAI	KALMQLTTKA	TTQIAPKQVA	GTGVQ	