

Vaccinia Virus, Western Reserve, L1R Protein with C-Terminal Histidine Tag, Recombinant from Baculovirus

Catalog No. NR-2625

For research use only. Not for human use.

Contributor:

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Manufacturer:

Chesapeake PERL, Inc., Savage, Maryland

Product Description:

NR-2625 is a recombinant form of the L1R membrane glycoprotein [L1R(185t); residues 1 to 185, C-terminal histidine-tagged]¹ of the Western Reserve (WR) strain of vaccinia virus. The full length L1R protein is 250 residues (GenPept: P07612).² NR-2625 was produced in cabbage looper (*Trichoplusia ni*) insect larvae using a baculovirus expression vector system³ and was purified using nickel affinity chromatography. The predicted protein sequence is shown in Table 1 below. Non-vaccinia virus residues are underlined.

Material Provided:

Each vial contains approximately 1 mg of NR-2625 in 20 mM phosphate buffer (pH 7.0) containing 20 mM NaCl/50% glycerol (v/v). The concentration, expressed as mg per mL, is shown on the Certificate of Analysis.

Packaging/Storage:

NR-2625 was packaged aseptically in cryovials. The product is provided on dry ice and should be stored at -80°C or colder immediately upon arrival. Repeated freeze-thaw cycles of this product should be avoided.

Functional Activity:

NR-2625 was demonstrated to be functionally active based on its reactivity with mouse monoclonal antibody to L1R (BEI Resources NR-417).

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Vaccinia Virus, Western Reserve, L1R Protein with C-Terminal Histidine Tag, Recombinant from Baculovirus, NR-2625."

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/bmb15/index.htm.

Disclaimers:

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References:

1. Aldaz-Carroll, L., et al. "Physical and Immunological Characterization of a Recombinant Secreted Form of the Membrane Protein Encoded by the Vaccinia Virus L1R Gene." Virology 341 (2005): 59–71. PubMed: 16083934.
2. Su, H.-P., et al. "The 1.51-Å Structure of the Poxvirus L1 Protein, a Target of Potent Neutralizing Antibodies." Proc. Natl. Acad. Sci. U.S.A. 102 (2005): 4240–4245. PubMed: 15761054.
3. PERLXpress™, Chesapeake Protein Expression and Recovery Labs (PERL).

4. Lustig, S., et al. "Combinations of Polyclonal or Monoclonal Antibodies to Proteins of the Outer Membranes of the Two Infectious Forms of Vaccinia Virus Protect Mice against a Lethal Respiratory Challenge." J. Virol. 79 (2005): 13454–13462. PubMed: 16227266.
5. Fogg, C., et al. "Protective Immunity to Vaccinia Virus Induced by Vaccination with Multiple Recombinant Outer Membrane Proteins of Intracellular and Extracellular Virions." J. Virol. 78 (2004): 10230–10237. PubMed: 15367588.

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Table 1 - Predicted Protein Sequence

1	<u>DP</u> AMGAAASI	QTTVNTLSER	ISSKLEQEAN	ASAQTKCDIE	IGNFYIRQNH
51	GCNLTVKNMC	SADADAQLDA	VLSAATETYS	GLTPEQKAYV	PAMFTAALNI
101	QTSVNTVVRD	FENYVKQTCN	SSAVVDNKLK	IQNVIIDECY	GAPGSPTNLE
151	FINTGSSKGN	CAIKALMQLT	TKATTQIAPK	QVAGTGVQHH	<u>HHHH</u>

Non-vaccinia virus amino acids are underlined.