

Protein L1R from Monkeypox Virus with N-Terminal Histidine Tag, Recombinant from *Escherichia coli*

Catalog No. NR-58634

Sino Biological Catalog No. 40889-V07E

For research use only. Not for use in humans.

Contributor and Manufacturer:

Sino Biological, Wayne, Pennsylvania, USA

Product Description:

A recombinant form of protein L1R from monkeypox virus (MPXV) was expressed in *Escherichia coli* and purified using tag-based affinity purification.¹ NR-58634 contains the full-length MPXV L1R protein and features an HRV3C protease cleavage site and hexa-histidine tag at the N-terminus.¹ The predicted protein sequence is shown in Figure 1. NR-58634 has a theoretical molecular weight of approximately 19,630 daltons. Representative SDS-PAGE results are shown in Figure 2.¹ Representative SEC-HPLC results are shown in Figure 3.¹

MPXV protein L1R is a homolog of the vaccinia virus J1R protein. J1R protein plays a vital role in virus growth, plaque formation, and virion morphogenesis.¹

Material Provided:

Each vial contains approximately 50 µg of purified recombinant protein lyophilized from phosphate-buffered saline, pH 7.4 containing 5% trehalose, 5% mannitol and 0.01% Tween-80.

Packaging/Storage:

NR-58634 was packaged aseptically in cryovials. The product is provided at ambient temperature and should be stored under sterile conditions at -20°C to -80°C immediately upon arrival. NR-58634 is stable for twelve months at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage.¹ Freeze-thaw cycles should be avoided.

Reconstitution:

NR-58634 should be reconstituted with 200 µL sterile deionized water to a stock solution of 0.25 mg per mL.¹ Add water with occasional gentle mixing. Note: Avoid vigorous shaking or vortexing.

Storage of Reconstituted Protein:

Reconstituted NR-58634 should be stored at -80°C or colder immediately. Avoid repeated freeze-thaw cycles.

Citation:

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Protein L1R from Monkeypox Virus with N-Terminal Histidine Tag, Recombinant from *Escherichia coli*, NR-58634.”

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. 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see www.cdc.gov/biosafety/publications/bmb15/index.htm.

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References:

1. Lu, Z., Personal Communication.

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Figure 1: Predicted Protein Sequence

1 MHHHHHHLEV LFQGPMDHNQ YLLTMFFADD DSFFKYFASQ DDESSLSDIL
 51 QITQYLDFLL LLLIQSKNKL EAVGHCYESL SEEYRQLTKF TDSQDFKKLF
 101 NKVPIVTDGR VKLNKGYLFD FVISLMRFKK ESALATTAID PVRYIDPRRD
 151 IAFSNVMDIL KSNKVEK

Hexa-histidine tag – Residues 2 to 7

HRV3C protease – Residues 8 to 15

L1R protein – Residues 16 to 167 (represents amino acid residues 1 to 152)

Figure 2: Representative SDS-PAGE

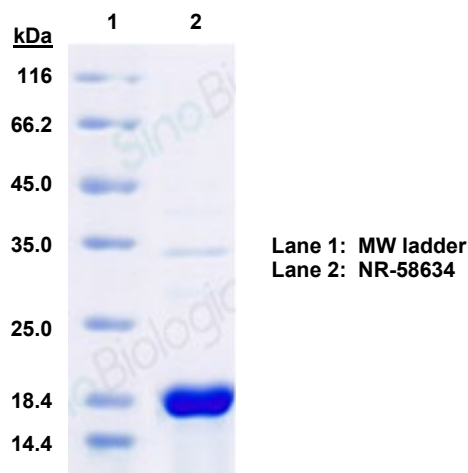


Figure 3: Representative SEC-HPLC

