

# A33R Protein from Vaccinia Virus (WR) with C-Terminal Histidine Tag, Recombinant from Baculovirus

Catalog No. NR-59415

## Product Description:

A recombinant form of the A33R membrane glycoprotein of the Western Reserve (WR) strain of vaccinia virus containing a C-terminal histidine-tag was produced in Sf9 insect cells using a baculovirus expression system and purified using nickel affinity chromatography. NR-59415 contains residues 58 to 185 of the A33R protein.

Lot: 70060102

Manufacturing Date: 25APR2023

| TEST                                                                                                                                                                                                                 | SPECIFICATIONS                                                        | RESULTS                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Appearance                                                                                                                                                                                                           | Report results                                                        | Colorless and clear                                                                              |
| Purity by SDS-PAGE Densitometry Scan                                                                                                                                                                                 | Protein band of interest represents > 90% of total staining intensity | Protein band of interest represents 98% of total staining intensity (Figure 1)                   |
| Concentration by Bradford Assay<br>Bovine Serum Albumin (BSA; standard)                                                                                                                                              | Report results                                                        | 0.560 mg/mL                                                                                      |
| Vial Contents<br>Quantity per vial<br>Volume per vial                                                                                                                                                                | Report results<br>Report results                                      | 420 µg<br>750 µL                                                                                 |
| Glycan Analysis by PNGase F Digestion                                                                                                                                                                                | Size reduction of protein band of interest on SDS-PAGE                | Size reduction of protein band of interest on SDS-PAGE (Figure 1)                                |
| Identification by Western Blot<br>Polyclonal anti-Vaccinia Virus immune globulin <sup>1</sup><br>Monoclonal anti-A33R <sup>2</sup><br>Monoclonal anti-L1R <sup>3</sup><br>Monoclonal anti-histidine tag <sup>4</sup> | Reactive<br>Reactive<br>Report results<br>Reactive                    | Reactive (Figure 2A)<br>Reactive (Figure 2B)<br>Not reactive (Figure 2C)<br>Reactive (Figure 2D) |
| Endotoxin Content<br>(Limulus Amoebocyte Lysate Assay)                                                                                                                                                               | Report results                                                        | 14.5 EU/mg                                                                                       |
| Filtration                                                                                                                                                                                                           | Report results                                                        | 0.2 µm sterile-filtered                                                                          |

<sup>1</sup>Using a 1:500 dilution of human polyclonal anti-Vaccinia Virus immune globulin (BEI Resources NR-650) as primary antibody and a 1:1000 dilution of HRP-conjugated goat anti-human IgG (Sigma AP112P) as secondary antibody.

<sup>2</sup>Using a 1:250 dilution of mouse monoclonal anti-A33R (BEI Resources NR-565) as primary antibody and a 1:500 dilution of HRP-conjugated goat anti-mouse IgG (R&D Systems HAF007) as secondary antibody.

<sup>3</sup>Using a 1:1000 dilution of mouse monoclonal anti-L1R (BEI Resources NR-45114) as primary antibody and a 1:1000 dilution of HRP-conjugated goat anti-mouse IgG (R&D Systems HAF007) as secondary antibody.

<sup>4</sup>Using a 1:1000 dilution of mouse monoclonal anti-histidine tag (Takara 631212) as primary antibody and a 1:1000 dilution of HRP-conjugated goat anti-mouse IgG (R&D Systems HAF007) as secondary antibody.

Figure 1: SDS-PAGE Glycan Analysis

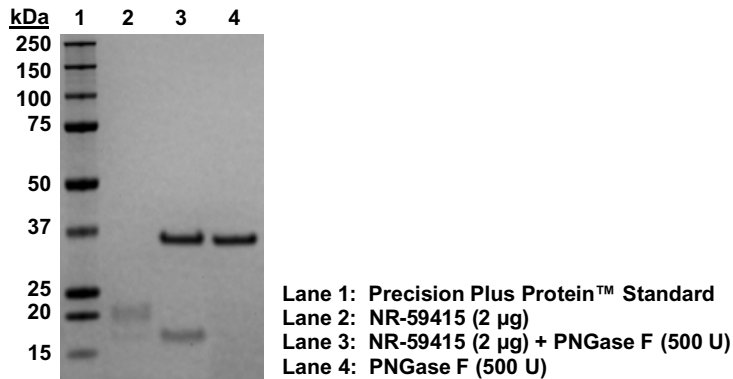
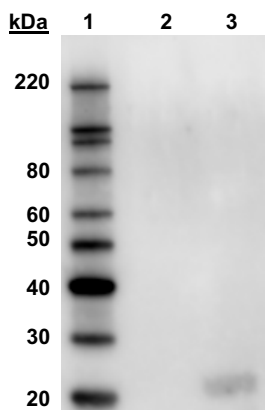


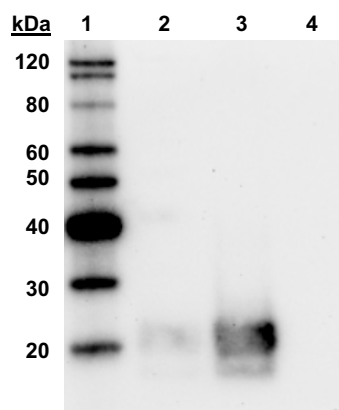
Figure 2: Western Blot Analysis

A: Monoclonal Anti-Vaccinia Virus



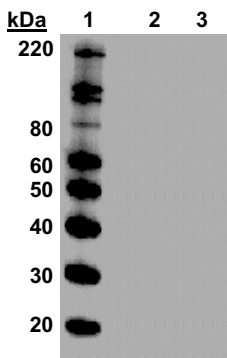
Lane 1: MagicMark™ XP Western Protein Standard  
 Lane 2: BSA (2 µg)  
 Lane 3: NR-59415 (2 µg)

B: Monoclonal Anti-A33R



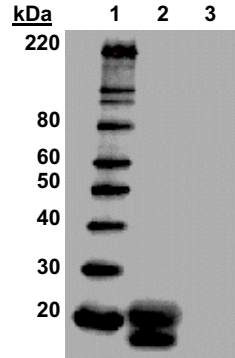
Lane 1: MagicMark™ XP Western Protein Standard  
 Lane 2: NR-59415 (2 µg)  
 Lane 3: NR-59415 (4 µg)  
 Lane 4: BSA (2 µg)

C: Monoclonal Anti-L1R



Lane 1: MagicMark™ XP Western Protein Standard  
 Lane 2: NR-59415 (1 µg)  
 Lane 3: BSA (1 µg)

D: Monoclonal Anti-His



Lane 1: MagicMark™ XP Western Protein Standard  
 Lane 2: NR-59415 (1 µg)  
 Lane 3: BSA (1 µg)

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13 OCT 2023

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