**Product Information Sheet for NR-51469**

**Glycoprotein from Lassa Virus, ISTH-2018-014, Recombinant from Baculovirus**

**Catalog No. NR-51469**  
This reagent is the tangible property of the U.S. Government.

**For research use only. Not for human use.**

**Contributor and Manufacturer:**  
BEI Resources

**Product Description:**  
A recombinant form of the glycoprotein complex (GPC) from Lassa virus (LASV), ISTH-2018-014 (GenPept: AZI96346) was produced in Sf9 insect cells using a baculovirus expression system, purified by nickel affinity chromatography under denaturing conditions and refolded by direct dilution. The recombinant protein includes the GPC ectodomain, thrombin cleavage site, T4 foldon trimerization domain and a C-terminal octa-histidine tag. LASV, ISTH-2018-014 was initially sequenced by the Irrua Specialist Teaching Hospital (ISTH), and the nucleotide sequence was codon-optimized for protein expression. The amino acid sequence is shown in Figure 1. NR-51469 has a theoretical molecular weight of 53,000 daltons.

**Material Provided:**  
Each vial contains approximately 1 mL of NR-51469 in 20 mM Tris (pH 8) with 500 mM NaCl, 0.5% CHAPS, 800 mM urea, 1 mM dithiothreitol and 10% glycerol. The concentration, expressed as µg per mL, is shown on the Certificate of Analysis.

**Packaging/Storage:**  
NR-51469 was packaged aseptically in cryovials. The product is provided on ice bricks and should be stored at -20°C immediately upon arrival. Freeze-thaw cycles should be avoided.

**Functional Activity:**  
NR-51469 reacts with polyclonal anti-Lassa virus hyperimmune mouse ascitic fluid in western blot analysis.

**Citation:**  
Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Glycoprotein from Lassa Virus, ISTH-2018-014, Recombinant from Baculovirus, NR-51469.”

**Biosafety Level:**  
1


**Disclaimers:**  
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**References:**  

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Figure 1 – Predicted Protein Sequence

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1  MGQIITFFQE VPHVIEVMN IVLIALSLLA ILKGIYNVAT CGLFGLVSFL
51  LLCGRSCSTT YKGVYELQTL ELDMASTNMT MPLSCTKNS HHYIMVQNET
101  GLE LTNNTS IINHKFCNL S DAHKKNLVDH ALMSISTFTH LSIPNFNQYE
151  AMSCDFNGGK ISVQYNLSHT YAVDAANHCG TIANGVLQTF MRMAWGGSYI
201  ALDSGKGSWD CIMT SYQ YLI IQNTT WEDHC QFSRPSPIGY LGLLSQRTRD
251  IYISRRLGT FTWTLSDSEG NETPGGYCLT RWMLIEAELK CFGNTAVAKC
301  NEKHDEEFCD MLRLFDFNQK AIRRLKTEAQ MSIQLINKAV NALINDQLIM
351  KNLRLDIMGI PYCNYSKYWY LNH TVTGRTS LPR CWLVSNG SYLNE T HFSD
401  DIEQQADNMI TELLQKEYIE RQGLVPRGSG YIPEAPRDGQ AYVRKDGEWV
451  LLSTFLGGSH HHHHHHH
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GPC ectodomain – Residues 1 to 423 (represents amino acid residues 1 to 423)
Thrombin cleavage site – Residues 424 to 429
T4 foldon trimerization domain – Residues 430 to 456
Plasmid-based residues – 457 to 459
Octa-histidine tag – Residues 460 to 467