Nonstructural Protein 1 (NS1) with N-terminal Histidine Tag from Zika Virus, Recombinant from Baculovirus

Catalog No. NR-50872
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Contributor and Manufacturer:
BEI Resources

Product Description:
A recombinant form of the Zika virus (ZIKV) nonstructural protein 1 (NS1) containing an N-terminal histidine tag was produced in Sf9 insect cells using a baculovirus expression vector system and was purified by immobilized-metal affinity chromatography. The NS1 protein includes an N-terminal hexa-histidine tag. The predicted protein sequence is shown in Figure 1. NR-50872 has 361 residues and has a theoretical molecular weight of 41,203 daltons. The crystal structure for ZIKV NS1 protein (GenPept: AMZ03556) has been solved at 1.89 Å resolution (PDB: 5K6K).

Material Provided:
Each vial contains 50 µg to 150 µg of purified recombinant NS1 protein in PBS (pH 7.4). The protein content in µg and the concentration, expressed as µg/mL, are shown on the Certificate of Analysis.

Packaging/Storage:
NR-50872 was packaged aseptically, in screw-capped plastic cryovials. This product is provided on blue ice and should be stored at -20°C immediately upon arrival. Freeze-thaw cycles should be avoided.

Citation:
Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Nonstructural Protein 1 (NS1) with N-terminal Histidine Tag from Zika Virus, Recombinant from Baculovirus, NR-50872.”

Biosafety Level: 1

Disclaimers:
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References:

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## Figure 1 – Predicted Protein Sequence

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<tr>
<th>Residue</th>
<th>Aminos</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>ADPHHHHHHD VGCSVDFSKK ETRCGTGVFV YNDVEAWRDR YKYHPDSPRR</td>
</tr>
<tr>
<td>51</td>
<td>LAAAVQQAWE DGICGISSVS RMENIMWRSV EGETNIALEE NGVQLTVVVG</td>
</tr>
<tr>
<td>101</td>
<td>SVKNPMWRGP QRLPVFVEL PHGKAWGKS YFVRAAKTNN SFVVDGDTLK</td>
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<tr>
<td>151</td>
<td>ECPKLHRAWN SFLVEDHGFG VFHTSVWLKV REDSLECDP AVIGTAVGK</td>
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<td>201</td>
<td>EAVHSDLGYW IESEKNDTWR LKRAHLEMK TCEWPKSHTL WTDGIEESDL</td>
</tr>
<tr>
<td>251</td>
<td>IIPKSLAGPL SHHNTREYR TQMGPWHE ELEIRFEECP GTKHVEEETC</td>
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<td>301</td>
<td>GTRGPSLRST TASGRVIEEW CCRECTMPPPL SFRAKDCWY GMEIRPRKEP</td>
</tr>
<tr>
<td>351</td>
<td>ESNLVRSMVT A</td>
</tr>
</tbody>
</table>

Plasmid-derived amino acids – Residues 1 to 3  
Hexa-histidine tag – Residues 4 to 9  
**NS1 protein** – Residues 10 to 361 [represents amino acid residues 795 to 1146 of the native NS protein (GenPept: AMZ03556)]