

MRC PPU Reagents and Services

Standard Operating Procedure

Preparation of Influenza A Virus NS1 [1 - 231]

Enzyme description:- IAV NS1 [1 - 231]

Clone number:- DU 70822

Source:- Recombinant

Expression system:- *E.coli*

Tag:- N-terminal GST

Purification method:- GSH Agarose

Calculated molecular mass:-

Monoisotopic 52, 657.08 daltons

Average Mass 52, 690.96 daltons

[cysteines reduced, methionines have not been oxidised]

Theoretical pI:- 6.15

Purity:- 80 %

Enzyme storage buffer:-

50 mM Tris-HCl pH 7.5, 270 mM Sucrose, 150 mM NaCl, 0.1 mM EGTA, 0.5 mM TCEP

Storage temperature:- -70 °C

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Clone Data Sheet

Influenza A Virus NS1 [1 – 231]

<u>Protein</u>	IAV NS1 [1 - 231]
<u>Clone number</u>	DU 70822
<u>Species</u>	Influenza A virus (IAV) strain A/Puerto Rico/8/1934(H1N1) ('PR8')
<u>Tags</u>	N-terminal GST
<u>Bacterially expressed protein</u>	<p>MSPILGYWKIKGLVQPTRLLLEYLEEKYEEHLYERDEGDKWRNKKFELG LEFPNLPYYIDGDVKLTQSMAIIRYIADKHNMLGGCPKERAEISMLEGA VLDIRYGVSR IAYS KDFETLKVDFLSKLPEMLKMFEDRLCHKTYLNGDH VTHPDFMLYDALDVVLYMDPMCLDAFPKLVCFKKRIEAI PQIDKYLKSS KYIAWPLQGWQATFGGGDHPPKSDLEVL FQGPLGS MDPNTVSS FQVDCF LWHVRKR VADQELGDAPFLDRLRRDQKSLRGRGSTLGLDIKTATRAGKQ IVERILKEESDEALKMTMASVPASRYLTDMTLEEMSRDWSMLIPKQKVA GPLCIRMDQAIMDKNIILKANFSVIFDRLETLLRAFTTEGAIVGEIS PLPSLPGHTAEDVKNAGVVLIGGLEWNDNTVVRVSETLQRFWRSSNENG RPPLTPKQKRE MAGTIRSEV</p>
<u>Native sequence</u>	<p>Amino acids M1 – V231 (end residue) of IAV NS1 protein. Residue M232 of the fusion protein is equivalent to M1 of the native enzyme. The GST tag is located at residues 1 – 220.</p>
<u>Protease cleavage</u>	PreScission (<u>LEVLFQGP</u>) residues 221 - 229