

MRC PPU Reagents and Services

Standard Operating Procedure

Preparation of Influenza A Virus NP [1 – 498]

Enzyme description:- IAV NP [1 - 498]

Clone number:- DU 70825

Source:- Recombinant

Expression system:- *E.coli*

Tag:- N-terminal MBP

Purification method:- Amylose Resin

Calculated molecular mass:-

Monoisotopic 100, 815.47 daltons

Average Mass 100, 879.14 daltons

[cysteines reduced, methionines have not been oxidised]

Theoretical pI:- 6.29

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 NP [1 – 498]

<u>Protein</u>	IAV NP [1 - 498]
<u>Clone number</u>	DU 70825
<u>Species</u>	Influenza A virus (IAV) strain A/Puerto Rico/8/1934(H1N1) ('PR8')
<u>Tags</u>	N-terminal MBP
<u>Bacterially expressed protein</u>	<p>MKIEEGKLVIIWINGDKGYNGLAEVGGKFEKDTGIKVTVEHPDKLEEKFP QVAATGDGPDIIIFWAHDRFGGYAQSGLLAEITPDKAFQDKLYPFTWDAV RYNGKLIAYPIAVEALSIIYNKDLLPNPPKTWEEIPALDKELKAKGKSA LMFNLQEPYFTWPLIAADGGYAFKYENGGYDIKDVGVNAGAKAGLTF VDLIKXKHMNADTDYSIAEAAFNKGETAMTINGPWAWNSIDTSKVNYGV TVLPTFKGQPSKPFVGVLSAGINAASPNKELAKEFLENYLLTDEGLEAV NKDKPLGAVALKSYYEELVKDPRIAAATMENAQKGEIMPNIPOMSAFWYA VRTAVINAASGRQTVDEALKDAQTNSSNNNNNNNNNNLGDGDDDKVPEF LEVLFGQPLGSPGEFMASQGTKRSYEQMETDGERQNAEIRASVGMIG GIGRFYIQMCTELKLSDYEGRLIQNSLTIERMVLSAFDERRNKYLEEHP SAGDKPKKTGGPIYRRVNGKWMRELILYDKEEIRRIWRQANNGDDATAG LTHMMIWHSNLNDATYQRTALVRTGMDPRMCSLMQGSTLPRRSGAAGA AVKGVGTMVMEIVRMKIRGINDRNFWRGENGRKTRIAAYERMCNIIKGF QTAAQKAMMDQVRESRNPNAEFEDLTFARSALILRGSVAHKSCLPAC VYGPVAVASGYDFEREGYSLVGIDPFRLQNSQVYSLIRPNENPAHKSQ VWMACHSAAFEDLRVLSFIKGTKVLPRGKLSTRGVQIASNENMETMESS TLELRSRYWAIRTRSGGNTNQORASAGQISIQPTFSVQRNLFPDRTTIM AAFNGNTEGRTSDMRTEIIRMESARPEVVSFQGRGVFELSDEKAASPI VPSFDMSNEGSYFFGDNAEEYDN</p>
<u>Native sequence</u>	Amino acids M1 – N498 (end residue) of IAV NP protein. Residue M408 of the fusion protein is equivalent to M1 of the native enzyme. The MBP tag is located at residues 1 – 367.
<u>Protease cleavage</u>	PreScission (<u>LEVLFGQP</u>) residues 393 - 400