

***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 70824

**Source:-** Recombinant

**Expression system:-** *E.coli*

**Tag:-** N-terminal GST

**Purification method:-** GSH Sepharose

**Calculated molecular mass:-**

Monoisotopic 83, 353.71 daltons

Average Mass 83, 407.34 daltons

[cysteines reduced, methionines have not been oxidised

**Theoretical pI:-** 8.55

**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

**Clone Data Sheet**

**Influenza A Virus NP [1 – 498]**

<b><u>Protein</u></b>	IAV NP [1 - 498]
<b><u>Clone number</u></b>	DU 70824
<b><u>Species</u></b>	Influenza A virus (IAV) strain A/Puerto Rico/8/1934(H1N1) ('PR8')
<b><u>Tags</u></b>	N-terminal GST
<b><u>Bacterially expressed protein</u></b>	MSPILGYWKIKGLVQPTRLLLEYLEEKYEEHYERDEGDKWRNKKFELG LEFPNLPPYYIDGDVKLTQSMAIIRYIADKHNMLGGCPKERAESMLEGA VLDIERYGSRIAYSKDFETLKVDFLSKPEMLKMFEDRLCHKTYLNGDH VTHPDFMLYDALDVLYMDPMCLDAFPKLVCFKKRIEAIPOQIDKYLKSS KYIAWPLQGWQATFGGGDHPPKSDELVL <b>FQGPLGSPEFMASQGTKRSYE</b> <b>QMETDGERQNATEIRASVGKMICGGIGRFYIQMCTELKLSDYEGRLIQNS</b> <b>LTIERMVLSAFDERRNKYLEEHPSAGKDPKKTGGPIYRRVNGKWMRELI</b> LYDKEEIRRRIWRQANNGDDATAGLTHMMIWHSNLNNDATYQRTRALVRTG MDPRMCSLMQGSTLPSSRSGAAGAAVKGVTMVMELVRMIKRGINDRNFW RGENGRKTRIAYERMCNILKGKFQTAQQKAMMDQVRESRNPNGNAEFEDL TFLARSALILRGSSVAHKSCLPACVYGPAAVASGYDFEREGRYSLVGIDPFR LLQNSQVYSLIRPNENPAHSQLVWMACHSAAFEDLRVLSFIKGTKVLP RGKLSTRGVQIASNENMETMESSTILERSRYWAIRTRSGGNTNQQRASA GQISIQPTFSVQRNLPFDRTTIMAAFNGNTEGRSDMRTEIIRMMESAR PEDVSFQGRGVFELSDEKAASPIVPSFDMSNEGSYFFGDNAEYDN
<b><u>Native sequence</u></b>	Amino acids M1 – N498 (end residue) of IAV NP protein. Residue M235 of the fusion protein is equivalent to M1 of the native enzyme. The GST tag is located at residues 1 – 220.
<b><u>Protease cleavage</u></b>	PreScission ( <u>LEVLFQGP</u> ) residues 221 - 229