

MRC PPU Reagents and Services

Standard Operating Procedure

Preparation of Influenza A Virus M1 [1 – 253]

Enzyme description:- IAV M1 [1 - 253]

Clone number:- DU 70821

Source:- Recombinant

Expression system:- *E.coli*

Tag:- N-terminal GST

Purification method:- GSH Sepharose

Calculated molecular mass:-

Monoisotopic 54, 681.93 daltons

Average Mass 54, 717.43 daltons

[cysteines reduced, methionines have not been oxidised]

Theoretical pI:- 8.01

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 M1 [1 – 253]

<u>Protein</u>	IAV M1 [1 - 253]
<u>Clone number</u>	DU 70821
<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<u>FQGPLGS</u>MSLLTEVETYVLSI IPSGPLKAEIAQRLEDVFAGKNTDLEVLMEWLKTRPILSPLTKGILGFV FTLTVPSEGLQRRRFVQNALNGNGDPNNMDKAVKLYRKLKREITFHGA KEISLSYSAGALASCMGLIYNRMGAVTTEVAFGLVCATCEQIADSQHR HRQMVTTTNPLIRHENRMVLASTTAKAMEQQMAGSSEQAAEAMEVASQAR QMVQAMRTIGTHPSSSAGLKNLLENLQAYQKRMGVQQMRFK</p>
<u>Native sequence</u>	<p>Amino acids M1 – K253 (end residue) of IAV M1 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>LEVL</u> FQGP) residues 221 - 229