

MRC PPU Reagents and Services

Standard Operating Procedure

Preparation of Influenza D Virus NP [1 – 552]

Enzyme description:- IDV NP [1 - 552]

Clone number:- DU 75213

Source:- Recombinant

Expression system:- *E.coli*

Tag:- N-terminal GST

Purification method:- GSH Agarose

Calculated molecular mass:-

Monoisotopic 88, 059.84 daltons

Average Mass 88, 116.43 daltons

[cysteines reduced, methionines have not been oxidised

Theoretical pI:- 8.87

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 D Virus NP [1 – 552]

<u>Protein</u>	IDV NP [1 - 552]
<u>Clone number</u>	DU 75213
<u>Species</u>	Influenza D virus (IDV) strain D/bovine/Oklahoma/660/2013
<u>Tags</u>	N-terminal GST
<u>Bacterially expressed protein</u>	MSPILGYWKIKGLVQPTRLLLEYLEEKYEEHYERDEGDKWRNKKFELG LEFPNLPPYYIDGDVKLTQSMAIIRYIADKHNMLGGCPKERAESMLEGA VLDIIRGVSRRIAYSKDFETLKVDFLSKLPEMLKMFEDRLCHKTYLNGDH VTHPDFMLYDALDVLYMDPMCLDAFPKLVCFKKRIEAIPQIDKYLKSS KYIAWPLQGWQATFGGGDHPPKS <u>DLEVLFQGPLGS</u> MDSTKAQTPEEQRA KNAKTILENIQIYERMCIDLFGVSEDDKLI IENSISIERNMIRVVTDKKYQ DKKLKNAGSDLEKIANAGKVFCRVLVESTAGKCSARLGMALKPVNVEAVLT DVLGNELDRAAVLGKRMGFTAMFKSNLEEVLYQRGKNQLKKRNAAETFT LSQGASLEARFRPIMEKHLGVGTVVASIKNILASKKNGNYRNKMVRKPG GNRESWSPLEREISFLNKKLFPGPQRQLCKFEYLNDQEQLALNLMILD ASLILKPQVTHKMIMPWSMWLAVKKYAEMNKGS <u>PSLEDLAAYSGVRAFM</u> AFNTACYSKFTIGKGIVGDAEIMENGNDKMOTLAMACFGLAYEDTGIV AAMISQPMKKRYQLRGNFNPPEEGTIKGT SAGYFHKWAEGNRLPFNS FGTGESKQISNSGVFAVQRPSTTNIQRLAELMARNTGETSDNFTQLVQK IREQVGTFADQKANLREFTGGYIYDITDVTKSNPKI <u>PQLGGDSFFF</u> EFT GSDVPRGA <u>KRRVGGADDVTPGTSQPKKRGRQGAGAES</u> SMDIETVGED
<u>Native sequence</u>	Amino acids M1 – D552 (end residue) of IDV NP protein. Residue M232 of the fusion protein is equivalent to M1 of the native enzyme. The GST tag is located at residues 1 – 220.
<u>Protease cleavage</u>	PreScission (<u>LEVLFQGP</u>) residues 221 - 229