MRC PPU Reagents and Services

Standard Operating Procedure

Preparation of Influenza D Virus NS1 [1 – 243]

Enzyme description:- IDV NS1 [1 - 243]

Clone number:- DU 75214

Source:- Recombinant

Expression system:- *E.coli*

Tag:- N-terminal GST

Purification method:- GSH Agarose

Calculated molecular mass:-
Monoisotopic 54, 173.50 daltons
Average Mass 54, 208.35 daltons
[cysteines reduced, methionines have not been oxidised

Theoretical pI:- 5.42

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 NS1 [1 – 243]

Protein IDV NS1 [1 - 243]

Clone number DU 75214

Species Influenza D virus (IDV) strain D/bovine/Oklahoma/660/2013

Tags N-terminal GST

Bacterially expressed protein

MSPILGYWKIKGLVQPTRLLLEYLEEKYEEHLYERDEGDKWRNKKFELG
LEFPNLPYYIDGDVKLTQSMAIIRYIADKHNMLGGCPKERAEISMLEGA
VLDIRYGVSRIAYSKDFETLKVDFLSKLPEMLKMFEDRLCHKTYLNGDH
VTHPDFMLYDALDVVLYMDPMCLDAFPKLVCFKKRIEAIPQIDKYLKSS
KYIAWPLQGWQATFGGGDHPPKSDLEVLFQGPLGS**MSENKSVNTTNIRA
AISELALGAASWMDSSGLMTFEKMRKSAENSLRVEQVYEPRTWEDAVAE
GREILGFTTIAALRKPEETHAVELGKSIIYPLGGNPFYLSPCTIDTLYE
PKLIRQEEVLGVKYRNCNCFVKTAELLVTDMGEIIVLFCRNTEKPAYCL
KNFRRGDDPEKSVRKILRIWRSGLVVAVDAESRDEIRRYKSGCETDPFW
RREGATTGEVQELLGVIDKVEIQAGSSDGELFD**

Native sequence Amino acids M1 – D243 (end residue) of IDV 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.

Protease cleavage PreScission (LEVLFQGP) residues 221 - 229