MRC PPU Reagents and Services

Standard Operating Procedure

Preparation of Nucleocapsid Protein [1 - 419] SARS CoV2

Enzyme description:- N Protein [1 - 419]

Clone number:- DU 67726

Source:- Recombinant

Expression system:- *E. coli*

Tag:- N-terminal GST

Purification method:- GSH Agarose

Calculated molecular mass:-
Monoisotopic 72, 404.66 daltons
Average Mass 72, 449.86 daltons
[cysteines reduced, methionines have not been oxidised]

Theoretical pI:- 9.39

Purity:- 75 %

Enzyme storage buffer:-
50 mM Tris-HCl pH 7.5, 270 mM Sucrose, 150 mM NaCl, 0.1 mM EGTA, 0.1 % 2-mercaptoethanol, 0.03 % Brij-35

Storage temperature:- –70 °C

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Clone Data Sheet

Nucleocapsid Protein [1 – 419] SARS CoV2

Protein N Protein [1 - 419]

Clone number DU 67726

Accession number QHD43423.2

Tags N-terminal GST

Bacterially expressed protein

MSPILGYWKIKGLVQPTRLLLEYLEEKYEEHLYERDEGDKWRNKK
FELGLEFPNLPYYIDGDVKLTQSMAIIRYIADKHNMLGGCPKERA
EISMLEGAVLDIRYGVSRIAYSKDFETLKVDFLSKLPEMLKMFED
RLCHKTYLNGDHVTHPDFMLYDALDVVLYMDPMCLDAFPKLVCFK
KRIEAIPQIDKYLKSSKYIAWPLQGWQATFGGGDHPPKSDLEVLF
QGPLGS**MSDNGPQNQRNAPRITFGGPSDSTGSNQNGERSGARSKQ
RRPQGLPNNTASWFTALTQHGKEDLKFPRGQGVPINTNSSPDDQI
GYYRRATRRIRGGDGKMKDLSPRWYFYYLGTGPEAGLPYGANKDG
IIWVATEGALNTPKDHIGTRNPANNAAIVLQLPQGTTLPKGFYAE
GSRGGSQASSRSSSRSRNSSRNSTPGSSRGTSPARMAGNGGDAAL
ALLLLDRLNQLESKMSGKGQQQQGQTVTKKSAAEASKKPRQKRTA
TKAYNVTQAFGRRGPEQTQGNFGDQELIRQGTDYKHWPQIAQFAP
SASAFFGMSRIGMEVTPSGTWLTYTGAIKLDDKDPNFKDQVILLN
KHIDAYKTFPPTEPKKDKKKKADETQALPQRQKKQQTVTLLPAAD
LDDFSKQLQQSMSSADSTQA**

Native sequence Amino acids M1 – A419 (end).
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 – 228