

MRC PPU Reagents and Services

Standard Operating Procedure

Preparation of Nucleocapsid Protein [1 - 389] Human CoV 229E

Enzyme description:- Human CoV 229E N Protein [1 - 389]

Clone number:- DU 67703

Source:- Recombinant

Expression system:- *E. coli*

Tag:- N-terminal GST

Purification method:- GSH Agarose

Calculated molecular mass:-

Monoisotopic 70,246.91 daltons

Average Mass 70,290.93 daltons

[cysteines reduced, methionines have not been oxidised]

Theoretical pI:- 9.03

Purity:- 80 %

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 - 389] Human CoV 229E

<u>Protein</u>	Human CoV 229E N Protein [1 – 389]
<u>Clone number</u>	DU 67703
<u>Accession number</u>	NP_073556.1
<u>Tags</u>	N-terminal GST
<u>Bacterially expressed protein</u>	MSPILGYWKIKGLVQPTRLLEYLEEKYEEHLYERDEGDKWRNKK FELGLEFPNLPYYIDGDVKLTQSMAIIRYIADKHNMLGGCPKERA EISMLEGAVLDIRYGVSRIAYS KDFETLKVDFLSKLP EMLKMFED RLCHKTYLNGDHVTHPDMFLYDALDVVLYMDPMCLDAFPKLVCFK KRIEAIPQIDKYLKSSKYIAWPLQGWQATFGGGDHPKSDLEVL FQGPLGSMATVKWADASEPQGRGRIPYSLYSPLLVDSEQPWKVI PRNLVPINKKDKNKLIGYWNVQKRFRTRKGKRVDLSPKLH FYYL G TGPHKDAKFRERVEGVVWVAVDGAKTEPTGYGVRKNSEPEI PHF NQKLPNGVTVVEEPDSRAPSRSSQSRSGRSGESKPSRNPSSDR NHNSQDDIMKAVAAALKSLGFDKPQEKDKKSAKTGTPKPSRNQSP ASSQTSAKSLARSQSSETKEQKHEMQKPRWKRPND DVTSNVTQC FGPRDL DHNFGSAGVVANGVKAKGY PQFAELVPSTAAMLFD SHIV SKESGNTVVLTF TTRVTVPKDHPHLGKFLEELNAFTREMQQHPLL NPSALEFNPSQTS PATAEPVRDEVSIETDI IDEVN
<u>Native sequence</u>	Amino acids M1 – N389 (end). 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 (LEVLFQGP) residues 221 – 228