

MRC PPU Reagents and Services

Standard Operating Procedure

Preparation of NSP2 [1 - 638] SARS CoV2

Enzyme description:- NSP2 [1 - 638] SARS CoV2

Clone number:- DU 66414

Source:- Recombinant

Expression system:- *E. coli*

Tag:- N-terminal GST

Purification method:- GSH Agarose

Calculated molecular mass:-

Monoisotopic 97,272.37 daltons

Average Mass 97,335.55 daltons

[cysteines reduced, methionines have not been oxidised]

Theoretical pI:- 6.04

Purity:- 50 %

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

NSP2 [1 – 638] SARS CoV2

Protein NSP2 [1 - 638]

Clone number DU 66414

Accession number QHD43415.1

Tags N-terminal GST

**Bacterially
expressed protein**

MSPILGYWKIKGLVQPTRLLLEYLEEKYEHLIERDEGDKWRNKK
FELGLEFPNLPYYIDGDVKLTQSMAIIRYIADKHNMLGGCPKERA
EISMLEGAVLDIRYGVSR IAYS KDFETLKVDLFLSKLPEMLKMFED
RLCHKTYLNGDHVTHPDFMLYDALDVVLYMDPMCLDAFPKLVCFK
KRIEAIPOIDKYLKSSKYIAWPLQGWQATFGGGDHPKSDLEVL
QGPLGSAYTRYVDNNFCGPDGYPLECIKDLLARAGKASCTLSEQL
DFIDTKRGVYCCREHEHEIAWYTERSEKSYELQTPFEIKLAKKFD
TFNGECPNFVFP LNSIIKTIQPRVEKKKLDGFMGRIRSVYPVASP
NECNQMCLSTLMKCDHCGETSWQTGDFVKATCFEFCGTENLTKEGA
TTCGYLPQNAVVKIYCPACHNSEVGP EHS LAEYHNESGLKTI LRK
GGRTIAFGGCVFSYVGCHNK CAYWVPRASANI GCNHTGVVGESE
GLNDNLLEILOKEKVNINIVGDFKLNEEIAIILASFSASTSAFVE
TVKGLDYKAFKQIVESC GNFKVTKGKAKKGAWNIGEOKSILSPLY
AFASEAARVRSIFSR TLETAQNSVRVLQKAAITILDGISQYSLR
LIDAMMFTSDLATNNLVVMAYITGGVVQLTSQWLTNIFGTVYEKL
KPVLDWLEEKFKEGVEFLRDGWEIVKFISTCACEIVGGQIVTCAK
EIKESVQTFFKLVNKFLALCADSIIIGGAKLKALNLGETFVTHSK
GLYRKCVKSREETGLLMPLKAPKEIFLEGETLPTEVLTEEVVLK
TGDLQPLEQPTSEAVEAPLVGTPVCINGLMLEIKDTEKYCALAP
NMMVTNNTFTLKG

Native sequence Amino acids A1 - G638 (end).
Residue A232 of the fusion protein is equivalent to A1 of the native enzyme. The GST tag is located at residues 1 – 220.

Protease cleavage PreScission (LEVLFGQP) residues 221 - 228