

MRC PPU Reagents and Services

Standard Operating Procedure

Preparation of NSP1 [1 – 180] SARS CoV2

Enzyme description:- NSP1 [1 – 180]

Clone number:- DU 66413

Source:- Recombinant

Expression system:- *E. coli*

Tag:- N-terminal GST

Purification method:- GSH Agarose

Calculated molecular mass:-

Monoisotopic 46,569.73 daltons

Average Mass 46,599.47 daltons

[cysteines reduced, methionines have not been oxidised]

Theoretical pI:- 5.54

Purity:- 90 %

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

NSP1 [1 – 180] SARS CoV2

<u>Protein</u>	NSP1 [1 – 180]
<u>Clone number</u>	DU 66413
<u>Accession number</u>	QHD43415.1
<u>Tags</u>	N-terminal GST
<u>Bacterially expressed protein</u>	<p>MSPILGYWKIKGLVQPTRLLLEYLEEKYEEHLYERDEGDKWRNKK FELGLEFPNLPYYIDGDVKLTQSMAIIRYIADKHNMLGGCPKERA EISMLEGAVLDIRYGVSRIAYS KDFETLKVDLFLSKLPEMLKMFED RLCHKTYLNGDHVTHPDFMLYDALDVVLYMDPMCLDAFPKLVCFK KRIEAIPOIDKYLKSSKYIAWPLQGWQATFGGGDHPKSDLEVL <u>QGPLGSME</u>SLVPGFNEKTHVQLSLPVLQVRDVLVRGFGDSVEEVL SEARQHLKDGTCGLVEVEKGVLPQLEQPYVFIKRS DARTAPHGHV MVELVAELEGIQYGRSGETLGVLPVPHVGEIPVAYRKVLLRKNKNGK GAGGHSYGADLKSFDLGDELGTDDPYEDFQENWNTKHSSGVTRELM RELNGG</p>
<u>Native sequence</u>	<p>Amino acids M1 – G180 (end). Residue M232 of the fusion protein is equivalent to M1 of the native enzyme. The GST tag is located at residues 1 – 220.</p>
<u>Protease cleavage</u>	PreScission (<u>LEVLFQGP</u>) residues 221 - 228