

MRC PPU Reagents and Services

Standard Operating Procedure

Preparation of Envelope Protein [1 - 75] SARS CoV2

Enzyme description:- Envelope Protein [1 - 75]

Clone number:- DU 68522

Source:- Recombinant

Expression system:- *E. coli*

Tag:- N-terminal MBP

Purification method:- Amylose Resin

Calculated molecular mass:-

Monoisotopic 52,570.91 daltons

Average Mass 52,603.96 daltons

[cysteines reduced, methionines have not been oxidised]

Theoretical pI:- 4.97

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

Envelope Protein [1 – 75] SARS CoV2

Protein Envelope Protein [1 - 75]

Clone number DU 68522

Accession number QHD43418.1

Tags N-terminal MBP

**Bacterially
expressed protein**

MKIEEGKLVIIWINGDKGYNGLAEVGGKFEKDTGIKVTVEHPDKLE
EKFPQVAATGDGPDIIFWAHDRFGGYAQSGLLAEITPDKAFQDKL
YPFTWDAVRYNGKLIAYPIAVEALSLIYNKDLLPNPPKTWEEIPA
LDKELKAKGKSALMFNLQEPYFTWPLIAADGGYAFKYENGYDIK
DVGVDNAGAKAGLTFLVDLIKKNHMNADTDYSIAEAAFNKGETAM
TINGPWAWSNIDTSKVNYGVTVLPTFKGQPSKPFVGVLSAGINAA
SPNKELAKEFLENYLLTDEGLEAVNKDKPLGAVALKSYYYEELVKD
PRIAATMENAQKGEIMPNI PQMSAFWYAVRTAVINAASGRQTVDE
ALKDAQTNSSNNNNNNNNNNLGD~~DDDK~~VPEFLEVLFQGPLGSMY
SFVSEETGTLIVNSVLLFLAFVVFLLVTLAILTALRLCAYCCNIV
NVSLVKPSFYVYSRVKNLNSRV~~PDLLV~~

Native sequence Amino acids M1 – V75 (end).
Residue M404 of the fusion protein is equivalent to M1 of the
native enzyme. The MBP tag is located at residues 1 – 367.

Protease cleavage Enterokinase (DDDDK) residues 384 – 388
PreScission (LEVLFQGP) residues 393 – 400