

# *MRC PPU Reagents and Services*

## **Standard Operating Procedure**

### **Preparation of Envelope Protein [1 – 76] SARS CoV**

**Enzyme description:-** SARS E Protein [1 - 76]

**Clone number:-** DU 68499

**Source:-** Recombinant

**Expression system:-** *E. coli*

**Tag:-** N-terminal MBP

**Purification method:-** Amylose Resin

**Calculated molecular mass:-**

Monoisotopic 52, 566.88 daltons

Average Mass 52, 599.92 daltons

[cysteines reduced, methionines have not been oxidised]

**Theoretical pI:-** 4.89

**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 – 76] SARS CoV

**Protein** SARS E Protein [1 - 76]

**Clone number** DU 68499

**Accession number** NP\_828854.1

**Tags** N-terminal MBP

**Bacterially  
expressed protein**

MKIEEGKLVIWINGDKGYNGLAEVGGKFEKDTGIKVTVEHPDKLE  
EKFPQVAATGDGPDIIFWAHDRFGGYAQSGLLAEITPDKAFQDKL  
YPFTWDAVRYNGKLIAYPIAVEALSLLIYNKDLLPNPPKTWEEIPA  
LDKELKAKGKSALMFNLQEPYFTWPLIAADGGYAFKYENGKYDIK  
DVGVDNAGAKAGLTFVLVDLIKKNHMNADTDYSIAEAAFNKGETAM  
TINGPWAWSNIDTSKVNYGVTVLPTFKGQPSKPFVGVLSAGINAA  
SPNKELAKEFLENYLLTDEGLEAVNKDKPLGAVALKSYYYEELVKD  
PRIAATMENAQKGEIMPNIPOMSAFWYAVRTAVINAASGRQTVDE  
ALKDAQTNSSNNNNNNNNNNLGD~~DDDK~~VPEFLEVLFGQPLGSMY  
**SFVSEETGTLIVNSVLLFLAFVVFLLVTLAILTALRLCAYCCNIV**  
**NVSLVKPTVYVYSRVKNLNSSEGVPDLLV**

**Native sequence** Amino acids M1 – V76 (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 (LEVLFGQP) residues 393 – 400