

## *MRC PPU Reagents and Services*

### **Standard Operating Procedure**

#### **Preparation of ORF9A [1 - 97] SARS CoV2**

**Enzyme description:-** ORF9A [1 - 97]

**Clone number:-** DU 68497

**Source:-** Recombinant

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

**Tag:-** N-terminal MBP

**Purification method:-** Amylose Resin

**Calculated molecular mass:-**

Monoisotopic 55,001.14 daltons

Average Mass 55,035.58 daltons

[cysteines reduced, methionines have not been oxidised]

**Theoretical pI:-** 4.98

**Purity:-** 95 %

**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, 0.2 mM PMSF, 1 mM Benzamidine

**Storage temperature:-** -70 °C

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## Clone Data Sheet

### ORF9A [1 – 97] SARS CoV2

**Protein** ORF9A [1 - 97]

**Clone number** DU 68497

**Accession number** MN908947.3

**Tags** N-terminal MBP

**Bacterially  
expressed protein**

MKIEEGKLVIIWINGDKGYNGLAEVGGKFEKDTGIKVTVEHPDKLE  
EKFPQVAATGDGPDIIFWAHDRFGGYAQSGLLAEITPDKAFQDKL  
YPFTWDAVRYNGKLIAYPIAVEALSIIYNKDLLPNPPKTWEEIPA  
LDKELKAKGKSALMFNLQEPYFTWPLIAADGGYAFKYENGKYDIK  
DVGVDNAGAKAGLTFVLVDLIKKNHMNADTDYSIAEAAFNKGETAM  
TINGPWAWSNIDTSKVNYGVTVLPTFKGQPSKPFVGVLSAGINAA  
SPNKELAKEFLENYLLTDEGLEAVNKDKPLGAVALKSYYYEELVKD  
PRIAATMENAQKGEIMPNI PQMSAFWYAVRTAVINAASGRQTVDE  
ALKDAQTNSSNNNNNNNNNNLGD~~DDDK~~VPEFLEVL~~FQGP~~LGSM~~D~~  
**PKISEMHPALRLVDPQIQ~~LAV~~TRMENA~~VGRDQ~~NNVGP~~KV~~YPIILR**  
**LGSPLSL~~NMARK~~TLNSLEDKAFQ~~LTP~~IAVQMTKLATTEELPDEFV**  
**VVTVK**

**Native sequence** Amino acids M1 – K97 (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** kinase (DDDDK) residues 384 – 388  
PreScission (LEVL~~FQGP~~) residues 393 – 400