

# *MRC PPU Reagents and Services*

## **Standard Operating Procedure**

### **Preparation of Membrane Protein [1 - 221] SARS CoV**

**Enzyme description:-** SARS M Protein [1 - 221]

**Clone number:-** DU 67700

**Source:-** Recombinant

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

**Tag:-** N-terminal GST

**Purification method:-** GSH Agarose

**Calculated molecular mass:-**

Monoisotopic 51, 850.92 daltons

Average Mass 51, 884.68 daltons

[cysteines reduced, methionines have not been oxidised]

**Theoretical pI:-** 8.29

**Purity:-** 65 %

**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

### Membrane Protein [1 – 221] SARS CoV

<b><u>Protein</u></b>	SARS M Protein [1 - 221]
<b><u>Clone number</u></b>	DU 67700
<b><u>Accession number</u></b>	NP_828855.1
<b><u>Tags</u></b>	N-terminal GST
<b><u>Bacterially expressed protein</u></b>	<p>MSPILGYWKIKGLVQPTRLLLEYLEEKYEEHLYERDEGDKWRNKK FELGLEFPNLPYYIDGDVKLTQSMAIIRYIADKHMLGGCPKERA EISMLEGAVLDIRYGVSRIAYSKDFETLKVDLFLSKLPEMLKMFED RLCHKTYLNGDHVTHPDFMLYDALDVVLYMDPMCLDAFPKLVCFK KRIEAIPOIDKYLKSSKYIAWPLQGWQATFGGGDHPPKSDLEVL FQGPLGSMADNGTITVEELKQLLEQWNLVIGFLFLAWIMLLQFAYS NRNRFLYIIKLVFLWLLWPVTLACFVLAAYRINWVTGGIAIAMA CIVGLMWLSYFVASFRLFARTRSMWSFNPETNILLNVPLRGTIVT RPLMESELVIGAVIIRGHLRMAGHSLGRCDIKDLPKEITVATSRT LSYYKLGASQRVGTDSGFAAYNRYRIGNYKLNTDHAGSNDNIALL VQ</p>
<b><u>Native sequence</u></b>	<p>Amino acids M1 – Q221 (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>
<b><u>Protease cleavage</u></b>	PreScission ( <u>LEVLFQGP</u> ) residues 221 – 228