

MRC PPU Reagents and Services

Standard Operating Procedure

Preparation of Membrane Protein [1 - 219] MERS CoV

Enzyme description:- MERS M Protein [1 - 219]

Clone number:- DU 67702

Source:- Recombinant

Expression system:- *E. coli*

Tag:- N-terminal GST

Purification method:- GSH Agarose

Calculated molecular mass:-

Monoisotopic 51, 319.38 daltons

Average Mass 51, 353.06 daltons

[cysteines reduced, methionines have not been oxidised]

Theoretical pI:- 7.10

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 – 219] MERS CoV

<u>Protein</u>	MERS M Protein [1 - 219]
<u>Clone number</u>	DU 67702
<u>Accession number</u>	ATY74387.1
<u>Tags</u>	N-terminal GST
<u>Bacterially expressed protein</u>	MSPILGYWKIKGLVQPTRLLLEYLEEKYEEHLYERDEGDKWRNKK FELGLEFPNLPYYIDGDVKLTQSMAIIRYIADKHNLGGCPKERA EISMLEGAVLDIRYGVSRIAYSKDFETLKVDFLSKLPEMLKMFED RLCHKTYLNGDHVTHPDFMLYDALDVVLYMDPMCLDAFPKLVCFK KRIEAIPOIDKYLKSSKYIAWPLQGWQATFGGGDHPPKSDLEVL FQGPLGSMNMTQLTEAQIIAIIKDWNFAWSLIFLLITIVLQYGY PSRSMTVYVFKMFVLWLLWPSSMALSIFS AIYPIDLASQII SGIVA AVSAMMWISYFVQSIRLFMRTGSWWSFNPETNCLLNVP IGGTIV RPLVEDSTSVTAVVTNGHLKMAGMHFGACDYDRLPNEVTVAKPNV LIALKMVKRQSYGTNSGVAIYHRYKAGNYRSPPTADIELALLRA
<u>Native sequence</u>	Amino acids M1 – A219 (end). Residue M232 of the fusion protein is equivalent to M1 of the native enzyme. The GST tag is located at residues 1 – 220.
<u>Protease cleavage</u>	PreScission (<u>LEVLFQGP</u>) residues 221 – 228