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**Product Data Sheet**


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Product Name: SARS MERS, (18-751)

Cat. No.: GP26372

Batch No.: 1

**Product Data**

Purity &gt;98% Source Sf9, Baculovirus cells.

Physical Appearance solid Shipping Condition withIcePacks

Synonyms Middle East respiratory syndrome coronavirus, Human betacoronavirus 2c EMC/2012, MERS-CoV, MERS, MERSCoV S1 P, Spike1 glycoprotein, S1 glycoprotein, S1, Spike S1 Subunit protein, S1 Subunit

Amino Acid Sequence

YVDVGPDSVK SACIEVDIQQ TFFDKTWPRP IDVSKADGII YPQGRTYSNI  
TITYQGLFPY QGDHGDMYVY SAGHATGTTP QKLFVANYSQ DVKQFANGFV  
VRIGAAANST GTVIISPSTS ATIRKIYPAF MLGSSVGNFS DGKMGRFFNH  
TLVLLPDGCG TLLRAFYCIL EPRSGNHCPA GNSYTSFATY HTPATDCSDG  
NYNRNASLNS FKEYFNLRNC TFMYYTYNITE DEILEWFGIT QTAQGVHLFS  
SRYVDLYGGN MFQFATLPVY DTIKYYSIIP HSIRSIQSDR KAWAAFYVYK  
LQPLTFLLDF SVDGYIRRAI DCGFNDLSQL HCSYESFDVE SGVYSVSSFE  
AKPSGSVVEQ AEGVECDFSP LLSGTTPQVY NFKRLVFTNC NYNLTKLLSL  
FSVNDFTCSQ ISPAAIASNC YSSLILDYFS YPLSMKSDLS VSSAGPISQF  
NYKQSFNSPT CLILATVPHN LTTITKPLKY SYINKCSRL SDDRTEVPQL  
VNANQYSPCV SIVPSTVWED GDYYRKQLSP LEGGGWLVAS GSTVAMTEQL  
QMGGFQITVQY GTDTNSVCPK LEFANDTKIA SQLGNCVEYS LYGVSGRGVF  
QNCTAVGVRQ QRFVYDAYQN LVGYYSDDGN YYCLRACVSV PVSVIYDKET  
KTHATLFGSV ACEHISSTMS QYSRSTRSML KRRDSTYGPL QTPVGCVLGL  
VNSSLFVEDC KLPLGQSLCA LPDTPSTLTP RSVRHHHHHH

Formulation The SARS MERS solution (0.25mg/ml) contains 10% glycerol and Phosphate-Buffered Saline (pH 7.4).

**Introduction**

Since April 2012, cases of the Middle East Respiratory Syndrome Coronavirus (MERS-CoV) have been identified in various countries. Coronaviruses are the cause of the common cold, SARS (severe acute respiratory syndrome) and other severe illnesses with

**Caution: Product has not been fully validated for medical applications. For research use only.**

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high mortality rates, all are classified into coronavirus family. MERS-CoV is a new type of SARS found in the coronavirus family causing severe pneumonia with sudden and serious respiratory illness with high mortality rates as well. Since January 27th 2015, the WHO has reported 956 human cases, including 351 deaths. More cases of the new coronavirus strain are expected. Like in other coronaviruses, large surface spike glycoprotein is a central structural protein of this virus; it is located above the virion surface to bind and enter into the target cell. Spike protein has 2 domains- S1 and S2. The S1 domain is responsible for cellular tropism and interaction with target cell, while the S2 domain is responsible for membrane fusion. The C-terminal of S1 domain contains a receptor binding domain, and is also a potential target for vaccine development and an antigen for diagnosis.

### Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

### Background

SARS MERS Recombinant produced in Sf9 Baculovirus cells is a single, glycosylated polypeptide chain containing 740 amino acids (18-751aa) and having a molecular mass of 82.0kDa. SARS MERS is fused to a 6 amino acid His-tag at C-terminus & purified by proprietary chromatographic techniques.

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