

---

**Product Data Sheet**


---

Product Name: SARS MERS RBD  
 Cat. No.: GP26374  
 Batch No.: 1

**Product Data**

|                     |   |                    |                         |
|---------------------|---|--------------------|-------------------------|
| Purity              | >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 RBD, MERS RBD, receptor binding domain, RBD, Spike RBD protein, Spike glycoprotein, S glycoprotein, E2, Peplomer protein   |                    |                         |
| Amino Acid Sequence | ADPSGVYSVS SFEAKPSGSV VEQAEGVECD FSPLLSGTPP QVYNFKRLVF TNCNYNLTKL LSLFSVNDFT CSQISPAAIA SNCYSSLILD YFSYPLSMKS DLSVSSAGPI SQFNYKQSFS NPTCLILATV PHNLTTITKP LKYSYINKCS RLLSDDRTEV PQLVNANQYS PCVSIVPSTV WEDGDYYRKQ LSPLEGGGWL VASGSTVAMT EQLQMGFGIT VQYGTDTNSV CPKLEFANDT KIASQLGNCV EYHHHHHH |                    |                         |
| Formulation         | The SARS MERS RBD solution (0.5mg/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 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

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

---

## Product Data Sheet

---

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 RBD Recombinant produced in Sf9 Baculovirus cells is a single, glycosylated polypeptide chain containing 258 amino acids (358-606 aa) and having a molecular mass of 28.2kDa. SARS MERS RBD is fused to a 6 amino acid His-tag at C-terminus & purified by proprietary chromatographic techniques.

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

**Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com**

**Address: 10292 Central Ave. #205, Montclair, CA, USA**