

SARS-COV-2 (OMICRON) S PROTEIN RBD, HFC TAG**Cat.#:** 11483**Product Name:** SARS-CoV-2 (Omicron) S Protein RBD**Size:** 10 µg, 50 µg and 100 µg**Synonyms:** SARS-CoV-2 B.1.1.529 (Omicron) Spike RBD Protein**Target:** S protein RBD**UNIPROT ID:** P0DTC2**Description:** "Recombinant SARS-CoV-2 RBD(G339D

Background: SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2) also known as Covid19 (2019 Novel Coronavirus) is a virus that causes illnesses ranging from the common cold to severe diseases. The spike protein is a type I transmembrane protein containing two subunits, S1 and S2. S1 mainly contains a receptor binding domain (RBD), which accounts for recognizing the cell surface receptor, ACE2. S2 contains basic elements needed for the membrane fusion. Recent publications indicate that S1-RBD domain can induce virus neutralizing-antibody and T cell response.

Species/Host: HEK293

Molecular Weight: The protein has a predicted molecular mass of 51.2 kDa after removal of the signal peptide. The apparent molecular mass of RBD(G339D, S371L, S373P, S375F, K417N, N440K, G446S, S477N, T478K, E484A, Q493R, G496S, Q498R, N501Y, Y505H)-hFc is approximately 55-70 kDa due to glycosylation.

Molecular Characterization: S protein RBD(G339D, S371L, S373P, S375F, K417N, N440K, G446S, S477N, T478K, E484A, Q493R, G496S, Q498R, N501Y, Y505H)(Arg319-Phe541) hFc(Glu99-Ala330)

Purity: The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

Formulation & Reconstitution: Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

Storage & Shipping: Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

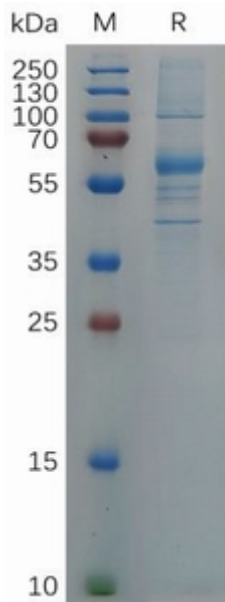


Figure 1. SARS-CoV-2 (2019-nCoV) S protein RBD (G339D, S371L, S373P, S375F, K417N, N440K, G446S, S477N, T478K, E484A, Q493R, G496S, Q498R, N501Y, Y505H), hFc Tag on SDS-PAGE under reducing condition.