

# SARS-COV-2 Spike S1 (Deltacron) Protein

Cat. No. COV-VM1SD

## Description

Recombinant SARS-COV-2 Spike S1(Deltacron) Protein is expressed from HEK293 with His tag at the C-Terminus.

## Source

It contains Gln14-Arg683(T19R, A27S, T95I, G142D, EFR156G, NL211I, INS214EPE, G339D, S371L, S373P, S375F, K417N, N440K, G446S, S477N, T478K, E484A, Q493R, G496S, Q498R, N501Y, Y505H, T547K, D614G, H655Y, N679K, P681H). Alanine substitutions (R683A) are introduced to stabilize the trimeric prefusion state of SARS-COV-2 Spike S1(Deltacron) Protein and abolish the furin cleavage site, respectively.

## Accession

QHD43416.1

## Molecular Weight

The protein has a predicted MW of 73.94 kDa. Due to glycosylation, the protein migrates to 90-120 kDa based on Bis-Tris PAGE result.

## Endotoxin

Less than 1EU per  $\mu\text{g}$  by the LAL method.

## Purity

> 95% as determined by Bis-Tris PAGE

## Formulation and Storage

### Formulation

Supplied as 0.22 $\mu\text{m}$  filtered solution in PBS (pH 7.4).

### Storage

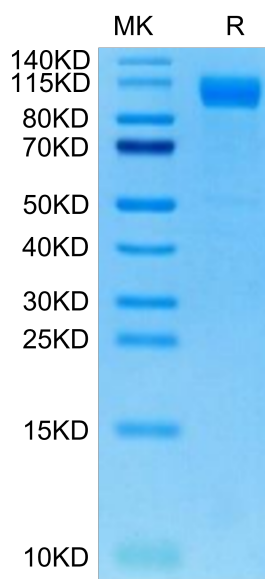
Valid for 12 months from date of receipt when stored at  $-80^{\circ}\text{C}$ . Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

The spike protein (S) of coronavirus (CoV) attaches the virus to its cellular receptor, angiotensin-converting enzyme 2 (ACE2). A defined receptor-binding domain (RBD) on S mediates this interaction. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity.

## Assay Data

### Bis-Tris PAGE



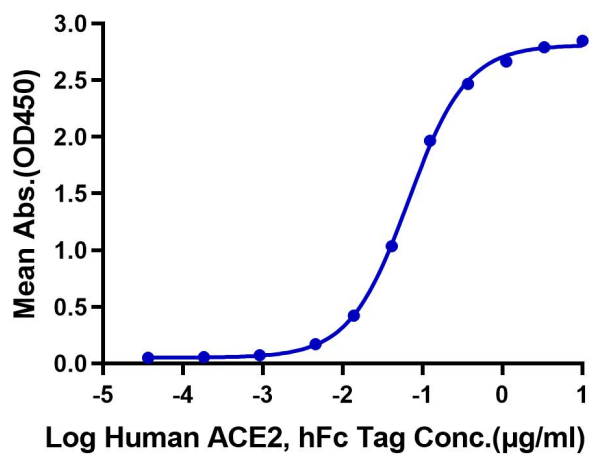
SARS-COV-2 Spike S1 (Deltacron) on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### ELISA Data

Assay Data

**SARS-COV-2 Spike S1(Deltacron), His Tag ELISA**

0.1µg SARS-COV-2 Spike S1(Deltacron), His Tag Per Well



Immobilized SARS-COV-2 Spike S1 (Deltacron) , His Tag at 1µg/ml (100µl/Well) on the plate. Dose response curve for Human ACE2, hFc Tag with the EC50 of 65.9ng/ml determined by ELISA.