

Rev03  
 Update: Dec,14,2021

**DATASHEET**

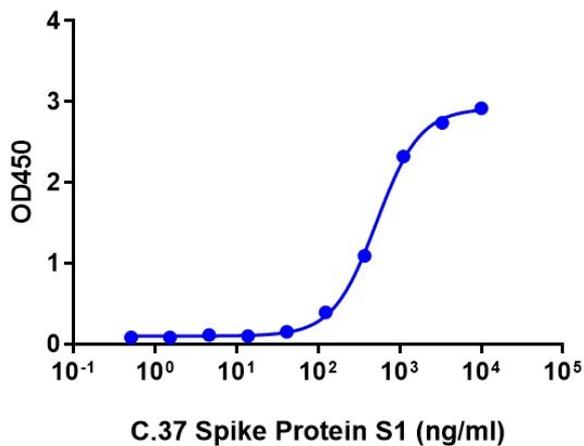
# SARS-CoV-2 Spike protein (S1, G75V, T76I, del 247-253, L452Q, F490S, His Tag)

Cat. No.: Z03698

## Product Introduction

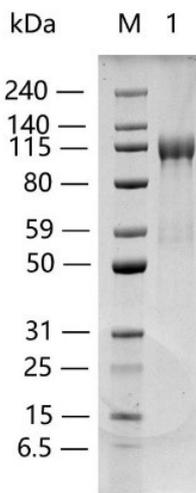
<b>Species</b>	SARS-CoV-2
<b>Protein Construction</b>	Expressed with the mutations of G75V, T76I, del 247-253, L452Q, F490S.
	
<b>Purity</b>	≥ 90% as analyzed by SDS-PAGE
<b>Endotoxin Level</b>	≤ 1 EU/μg of protein by gel clotting method
<b>Biological Activity</b>	This protein is validated to bind with human ACE2 in functional ELISA assay.
<b>Expression System</b>	CHO
<b>Theoretical Molecular Weight</b>	75.7 kDa
<b>Apparent Molecular Weight</b>	~112 kDa, on SDS-PAGE under reducing conditions.
<b>Formulation</b>	Supplied as a solution in PBS, pH 7.4.
<b>Concentration</b>	Please refer to the COA for the specific lot.
<b>Storage &amp; Stability</b>	Upon receiving, this product remains stable for up to 6 months at -20°C or below. Please avoid repeated freeze-thaw cycles.

## Examples



Immobilized ACE-2 Fc Chimera, Human (Cat. No.: Z03516) at 2 µg/mL can bind SARS-CoV-2 Spike protein (S1, G75V, T76I, del 247-253, L452Q, F490S, His Tag) (Cat. No.: Z03698) with a serial dilution.

THE™ His Tag Antibody [HRP], mAb, Mouse (Cat. No.: A00612) is used as a secondary antibody (0.2 µg/mL).



Lane 1: 1 µg of SARS-CoV-2 Spike protein (S1, G75V, T76I, del 247-253, L452Q, F490S, His Tag), reducing(R)  
 > 90% as analyzed by SDS-PAGE

## Background

**Target Background :** SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2) also known as 2019-nCoV (2019 Novel Coronavirus) is a virus that causes illnesses ranging from the common cold to severe diseases. The SARS-CoV-2 lambda variant was first identified in Peru in August 2020, and has quickly spread to other parts of South America and the United States. WHO classified lambda as a global "variant of interest". This variant carries a number of mutations with suspected implications, such as potential increased transmissibility or possible increased resistance to neutralizing antibodies. However, the full extent of those mutations' impact isn't yet well understood and will need further study. The lambda variant mainly contains L452Q and F400S point mutations in RBD domain, G75V, T76I and deletion mutation of 246-252 are located in S1 domain, which may enhance the infectivity.

**Synonyms :** C.37; Lambda variant

### References :

1. [Tracking SARS-CoV-2 variants.](#)
2. [SARS-CoV-2 lambda variant escapes immune response via spike mutations.](#)
3. [It Is Time To Pay Close Attention To The Lambda Variant Now Devastating South America.](#)

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.