

Datasheet for ABIN6963742

**SARS-CoV-2 Spike Protein (B.1.1.7 - alpha) (rho-1D4 tag)**[Go to Product page](#)

4 Images

2 Publications

## Overview

Quantity:	100 µg
Target:	SARS-CoV-2 Spike
Protein Characteristics:	B.1.1.7 - alpha
Origin:	SARS Coronavirus-2 (SARS-CoV-2), SARS CoV-2 Alpha
Source:	HEK-293 Cells
Purification tag / Conjugate:	This SARS-CoV-2 Spike protein is labelled with rho-1D4 tag.
Application:	ELISA, Ligand Binding Assay (LBA)

## Product Details

Purpose:	This is the spike protein of the mutant strain B.1.1.7, also commonly known as the "UK / Great Britain mutant".
Sequence:	Full-length sequence (aa 1 - 1273), del 69, del 70, del 144, N501Y, A570D, D614G, P681H, T716I, S982A, D1118H furin cleavage site "RRAR" mutated to "GSAG", KV986PP C-terminal Rho1D4 tag fused with spacer "GSSG" to protein sequence
Specificity:	Mutation that differ from canonical sequence of SPIKE protein: del 69-70, del 144, N501Y, A570D, D614G, P681H, T716I, S982A, D1118H
Characteristics:	"SARS CoV-2 full-length Spike B.1.1.7 Mutation" All viruses undergo fast mutations and adept quickly to the countermeasures that the immune systems creates against them. SARS-CoV-2 of the COVID-19 pandemic is no exception here. During the pandemic multiple mutant strains arose. To help the science combat these mutants we offer the SPIKE protein of these mutants in full-length and active in its native trimeric form,

## Product Details

	stabilized with the LMNG detergent.
Purification:	affinity chromatography
Purity:	> 98 % as determined by SDS-PAGE

## Target Details

Target:	SARS-CoV-2 Spike
Alternative Name:	SARS2 Spike glycoprotein ( <a href="#">SARS-CoV-2 Spike Products</a> )
Target Type:	Viral Protein
Molecular Weight:	142114 Da
UniProt:	<a href="#">P0DTC2</a>

## Application Details

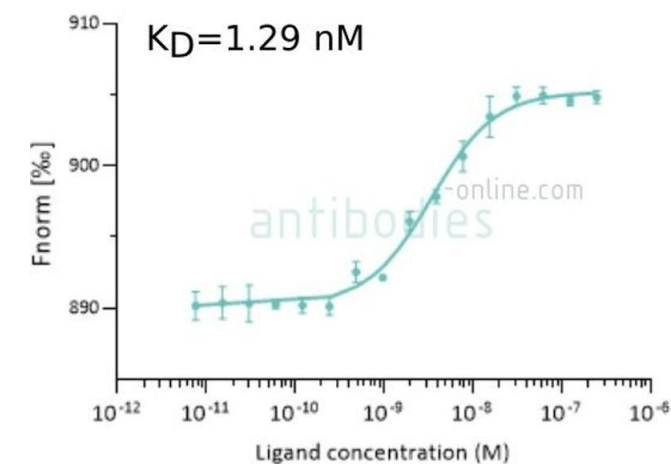
Application Notes:	ELISA assays, Ligand binding assays (e.g. SPR), Biochemical and biophysical analyses
Comment:	Further modifications: - furin cleavage site "682-RRAR SV-687" mutated to "682-GSAG PP-687" - C-terminal Rho1D4 tag fused with spacer "GSSG" to protein sequence Size: 1286 amino acids (including Rho1D4 tag and linker)
Restrictions:	For Research Use only

## Handling

Format:	Liquid
Buffer:	20 mM Hepes pH 7.5, 150 mM NaCl, 0.001 % LMNG
Storage:	-80 °C
Storage Comment:	Store at -80°C. Avoid freeze-thaw cycles

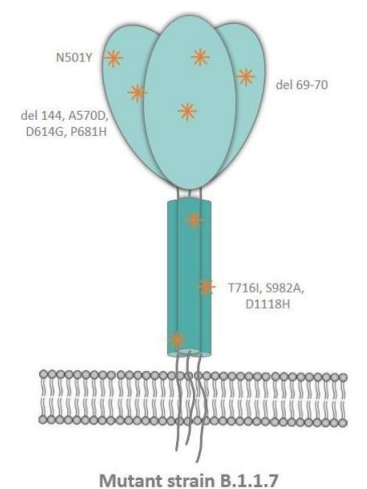
## Publications

Product cited in:	Albenzio, Santillo, Ciliberti, Figliola, Caroprese, Polito, Messina: "Milk nutrition and childhood epilepsy: An ex vivo study on cytokines and oxidative stress in response to milk protein fractions." in: <b>Journal of dairy science</b> , Vol. 101, Issue 6, pp. 4842-4852, (2018) ( <a href="#">PubMed</a> ).
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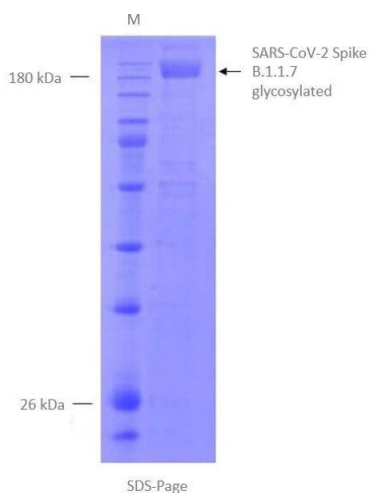


### Binding Studies

**Image 1.** Microscale thermophoresis measurement of binding of anti-SARS-CoV-2 Spike S1 antibody (RBD) CR3022 (ABIN6952546) to SARS-CoV-2 Spike (B.1.1.7 lineage) protein (ABIN6963742). The determined dissociation constant  $K_D$  is indicated.



**Image 2.** SARS CoV-2 Spike Protein B.1.1.7 Mutation (UK / Great Britain Mutant)



### SDS-PAGE

**Image 3.** SDS-Page of purified SPIKE in detergent mycelle.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN6963742.