

Datasheet for ABIN6964443

SARS-CoV-2 Spike Protein (P.1 - gamma) (rho-1D4 tag)

4 Images

2 Publications

[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	SARS-CoV-2 Spike
Protein Characteristics:	P.1 - gamma
Origin:	SARS Coronavirus-2 (SARS-CoV-2), SARS CoV-2 Gamma
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SARS-CoV-2 Spike protein is labelled with rho-1D4 tag.

Product Details

Purpose:	This is the spike protein of the mutant strain P.1, also commonly known as the "Brazil mutant".
Specificity:	Mutation that differ from canonical sequence of SPIKE protein: L18F, T20N, P26S, D138Y, R190S, K417T, E484K, N501Y, H655Y, T1027I, V1176F
Characteristics:	<p>"SARS CoV-2 full-length Spike P.1 Mutation"</p> <p>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.</p> <p>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, stabilized with the LMNG detergent.</p>
Purification:	affinity chromatography
Purity:	> 98 % as determined by SDS-PAGE

Target Details

Target:	SARS-CoV-2 Spike
Alternative Name:	SARS2 Spike glycoprotein (SARS-CoV-2 Spike Products)
Target Type:	Viral Protein
Molecular Weight:	142114 Da
UniProt:	P0DTC2

Application Details

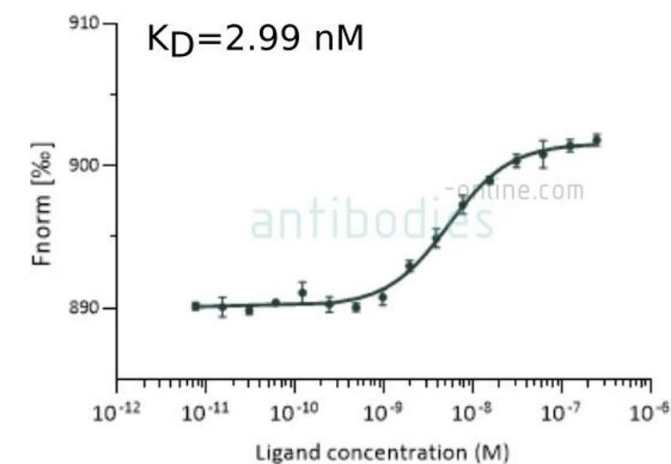
Comment:	<p>Further modifications:</p> <ul style="list-style-type: none">- furin cleavage site "682-RRAR SV-687" mutated to "682-GSAG PP-687"- C-terminal Rho1D4 tag fused with spacer "GSSG" to protein sequence <p>Size: 1286 amino acids (including Rho1D4 tag and linker)</p>
Restrictions:	For Research 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:	<p>Erickson, Logsdon, Rhea, Hansen, Holden, Banks, Smith, German, Farr, Morley, Weaver, Hirsch, Kovac, Kontseikova, Baumann, Omer, Raber: "Blood-brain barrier penetration of non-replicating SARS-CoV-2 and S1 variants of concern induce neuroinflammation which is accentuated in a mouse model of Alzheimer's disease." in: Brain, behavior, and immunity, Vol. 109, pp. 251-268, (2023) (PubMed).</p> <p>Bhalla, Payam, Morelli, Sharma, Johnson, Thomson, Jolly, Canfarotta: "Nanoplasmonic biosensor for rapid detection of multiple viral variants in human serum." in: Sensors and actuators. B, Chemical, Vol. 365, pp. 131906, (2022) (PubMed).</p>
-------------------	--



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 (P.1 lineage) protein (ABIN6964443). The determined dissociation constant K_D is indicated.

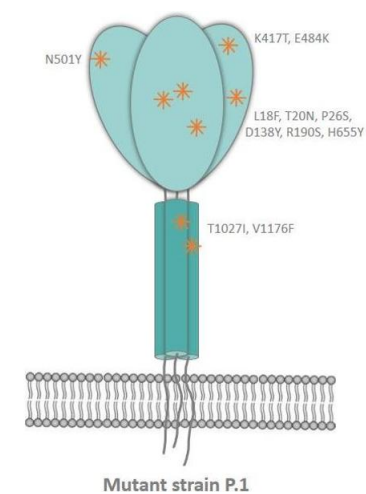
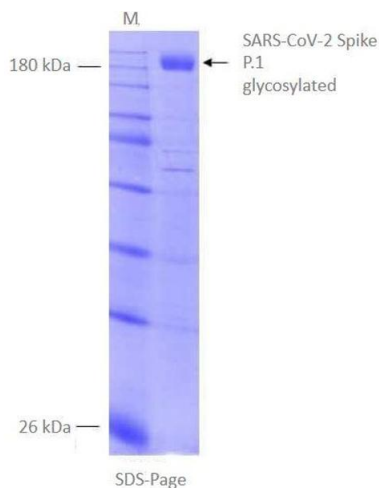


Image 2. SARS CoV-2 Spike P.1 Mutation (Bazil Mutant)



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 ABIN6964443.