Datasheet for ABIN7271641

SARS-CoV-2 Spike Protein (BA.2.76 - Omicron, Trimer) (His tag)

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Overview

Quantity:	50 µg
Target:	SARS-CoV-2 Spike
Protein Characteristics:	BA.2.76 - Omicron, Trimer
Origin:	SARS Coronavirus-2 (SARS-CoV-2), SARS CoV-2 Omicron
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SARS-CoV-2 Spike protein is labelled with His tag.

Product Details

Purpose:	SARS-CoV-2 Spike Trimer, His Tag (BA.2.76/Omicron) (MALS verified)
Sequence:	Val 16 - Pro 1213
Characteristics:	SARS-CoV-2 Spike Trimer, His Tag (BA.2.76/Omicron) (SPN-C522i) is expressed from human 293 cells (HEK293). It contains AA Val 16 - Pro 1213 (Accession # QHD43416.1 (T19I, LPP24-26del, A27S, G142D, V213G, Y248N, G339D, R346T, S371F, S373P, S375F, T376A, D405N, R408S, K417N, N440K, S477N, T478K, E484A, Q493R, Q498R, N501Y, Y505H, D614G, H655Y, N679K, P681H, N764K, D796Y, Q954H, N969K, R683A, R685A, F817P, A892P, A899P, A942P, K986P, V987P). The spike mutations are identified on the SARS-CoV-2 Omicron variant (Pango lineage: BA.2.76). The recombinant protein is expressed from human 293 cells (HEK293) with T4 fibritin trimerization motif and a polyhistidine tag at the C-terminus. Proline substitutions (F817P, A892P, A899P, A942P, K986P, V987P) and alanine substitutions (R683A and R685A) are introduced to stabilize the trimeric prefusion state of SARS-CoV-2 S protein and abolish the furin cleavage site, respectively.

Product Details

Purity:	>90 % as determined by SDS-PAGE.
Endotoxin Level:	Less than 1.0 EU per μg by the LAL method.
Grade:	MALS verified

Target Details

Target:	SARS-CoV-2 Spike
Abstract:	SARS-CoV-2 Spike Products
Background:	Synonyms:Spike,S protein,Spike glycoprotein,S glycoprotein,Description:It's been reported that SARS-CoV-2 can infect the human respiratory epithelial cells through interaction with the human ACE2 receptor. The spike protein is a large type I transmembrane protein containing two subunits, S1 and S2. S1 mainly contains a receptor binding domain (RBD), which is responsible for recognizing the cell surface receptor. S2 contains basic elements needed for the membrane fusion.The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity.
Molecular Weight:	138.0 kDa

Application Details

Application Notes:	This protein carries a polyhistidine tag at the C-terminus. The protein has a calculated MW of 138.0 kDa. The protein migrates as kDa under reducing (R) condition due to glycosylation.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	PBS
Storage:	-20 °C
Storage Comment:	-20°C