

Datasheet for ABIN7199356

SARS-CoV-2 Spike Protein (BA.4 - Omicron, BA.5 - Omicron, RBD) (His-Avi Tag,Biotin)[Go to Product page](#)**1** Publication

Overview

Quantity:	200 µg
Target:	SARS-CoV-2 Spike
Protein Characteristics:	BA.4 - Omicron, BA.5 - Omicron, RBD
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-Avi Tag,Biotin.

Product Details

Purpose:	Biotinylated SARS-CoV-2 Spike RBD, His,Avitag™ (BA.4&BA.5/Omicron) (MALS verified)
Sequence:	Arg 319 - Lys 537
Characteristics:	Biotinylated SARS-CoV-2 Spike RBD, His,Avitag (BA.4&BA.5/Omicron) is expressed from human 293 cells (HEK293). It contains AA Arg 319 - Lys 537 (Accession # QHD43416.1 (G339D, S371F, S373P, S375F, T376A, D405N, R408S, K417N, N440K, L452R, S477N, T478K, E484A, F486V, Q498R, N501Y, Y505H). The spike mutations are identified on the SARS-CoV-2 Omicron variant (Pango lineage: BA.4 and BA.5, GISAID clade: GRA).
Purity:	>95 % 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
Alternative Name:	SARS-CoV-2 Spike (SARS-CoV-2 Spike Products)
Background:	<p>Synonyms: Spike,S protein RBD,Spike glycoprotein Receptor-binding domain,S glycoprotein RBD,Spike protein RBD,</p> <p>Description: It's been reported that Coronavirus 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.</p>
Molecular Weight:	28.3 kDa

Application Details

Application Notes:	This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™). The protein has a calculated MW of 28.3 kDa. The protein migrates as 34-37 kDa under reducing (R) condition due to glycosylation.
Comment:	<p>Ready-to-use Avitag™ biotinylated protein:</p> <p>The product is exclusively produced using the Avitag™ technology. Briefly, a unique 15 amino acid peptide, the Avi tag, is introduced into the recombinant protein during expression vector construction. The single lysine residue in the Avi tag is enzymatically biotinylated by the E. Coli biotin ligase BirA.</p> <p>This single-point enzymatic labeling technique brings many advantages for commonly used binding assays. The biotinylation happens on the lysine residue of Avi tag, and therefore does NOT interfere with the target protein's natural binding activities. In addition, when immobilized on an avidin-coated surface, the protein orientation is uniform because the position of the Avi tag in the protein is precisely controlled.</p>
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	PBS, pH 7.4

Handling

Storage: -20 °C

Storage Comment: For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Publications

Product cited in: Johnson, Drugan, Miller, Evans: "38" in: , Vol. 1363, Issue Nucleic acids research, pp. 28-39, (1991)