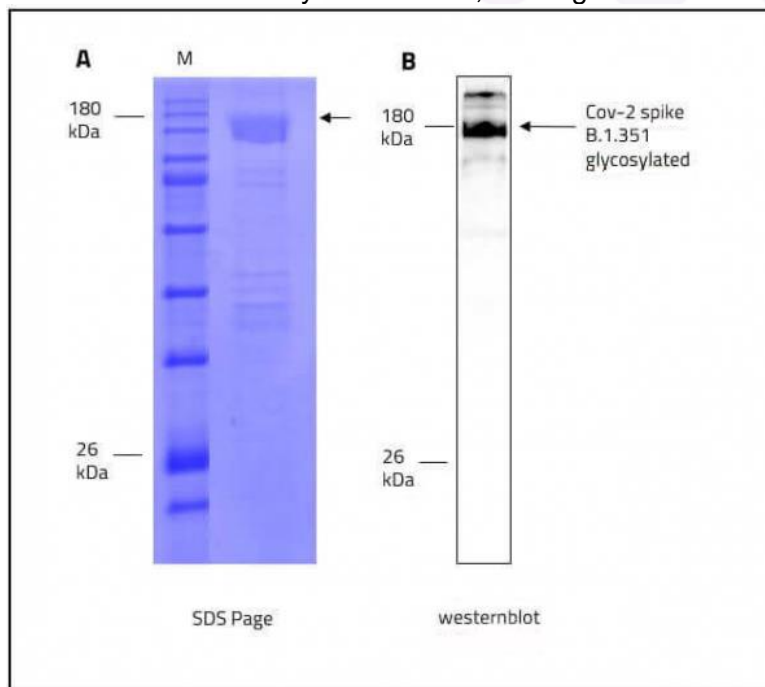


Datasheet

SARS-CoV-2 full-length Trimeric Spike Recombinant Antigen South African Variant with B.1.351 RBD Mutations

Catalogue No:	BSV-COV-PR-61	BSV-COV-PR-63	BSV-COV-PR-88
Pack Size:	100 µg	1 mg	10 mg
Product Name:	SARS-CoV-2 full-length Trimeric Spike Recombinant Antigen South African Variant with B.1.351 RBD Mutations		
WHO Reference:	501Y.V2/501.V2		
Description:	Spike protein of the South African Variant with B.1.351 RBD mutations. It is a full-length protein, which is active in its native trimeric form, that is stabilized in LMNG detergent.		
Alternative Name:	SPIKE_SARS2 Spike glycoprotein		
UniProt No:	P0DTC2		
Protein Class:	Single span transmembrane protein		
Organism:	Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)		
Sequence:	del 144, K417N, E484K, N501Y, A570D, D614G, P681H, T716I, S982A furin cleavage site "RRAR" mutated to "GSAG"; KV986PP		
Host:	Expressed in HEK293 Expi cells		
Size (Trimeric):	3 x 142 kDa = 426 kDa		
Buffer:	20 mM HEPES pH 7.5; 150 mM NaCl, 0.001% LMNG		
Form:	Liquid		
Function:	Host cell surface receptor binding; fusion of virus membrane with host endosome membrane		

>98% as determined by SDS-PAGE, see Fig. 1 A and B



Purity:

Fig.1: Size, purity and oligomerization state of CoV-2 spike protein assessed by SDS-PAGE and Western Blot.

Activity:	Not Determined
Applications:	ELISA assays, Ligand Binding assays, Biochemical & Biophysical analyses
Shipping:	Dry ice
Storage:	-80°C. Avoid freeze-thaw cycles.
Background:	The B.1.351 variant first identified in South Africa has spread to numerous European countries. It is characterised by eight lineage-defining mutations in the spike protein, including three at important residues in the receptor-binding domain (K417N, E484K and N501Y) that may have functional significance. Unlike the B.1.1.7 lineage detected in the UK; this variant does not contain the deletion at 69/70. This variant was first identified in Nelson Mandela Bay, South Africa, in samples dating back to the beginning of October 2020, and cases have since been detected outside of South Africa, including the United States.

Disclaimer: Our products are intended for molecular biology applications. These products are not intended for the diagnosis, prevention or treatment of a disease.