

# SARS-COV-2 SPIKE PROTEIN ANTIGEN ELISA FOR DETECTING ALL THREE MAJOR VARIANT STRAINS

# KBVH015-10

U.K. B.1.1.7 | South Africa B.1.351 | Brazil P.1/P.2

Viruses mutate, and SARS-CoV-2 is no exception. As global cases continue to increase, new mutations have emerged in various populations. This came to light in particular as the world approached 100M cases in December 2020, when three novel variants of concern (VoC) were all detected within the space of a month: B.1.1.7 in the UK, B.1.351 (501Y.V2) in South Africa and B.1.1.24/P.1 in Brazil.

To support researches in their study of SARS-CoV-2 variants, Krishgen now offers a **highly sensitive SARS-CoV-2 Spike Protein Antigen ELISA**(Cat no :KBVH015-10). Clinical studies show that it can detect all three major circulating variant strains, UK B.1.1.7, South Africa B.1.351 and Brazil P.1/P.2.

## REAGENTS, TECHNOLOGY AND FEATURES:



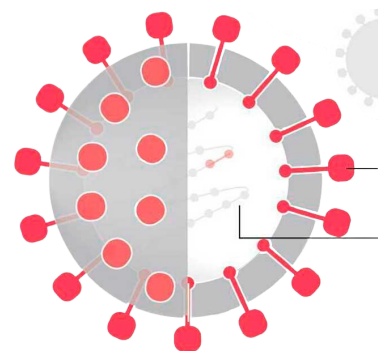
The kit employs a traditional sandwich ELISA technique for detection in human serum and plasma samples. Our existing ELISA was tested against the three new variants, to determine its eligibility to detect these strains.

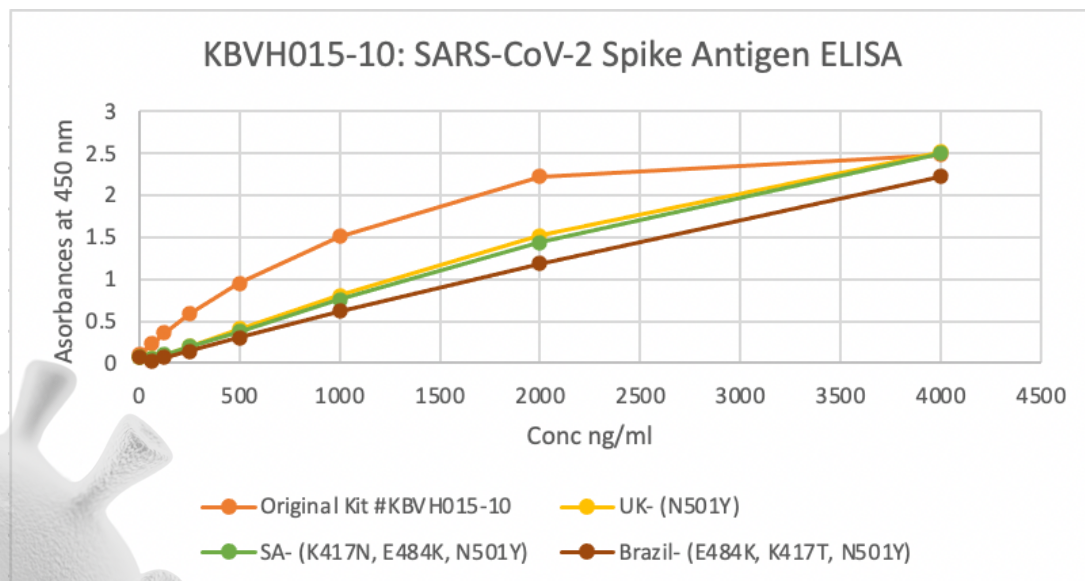
The capture antibodies used in the kit are specific against 2019-nCoV Coronavirus spike and have 100% cross reactivity with SARS-CoV Spike S1 Protein and the SARS-CoV Spike RBD Protein. A DNA sequence encoding the SARS-CoV-2 (2019-nCoV) Spike Protein (S1 Subunit) (YP\_009724390.1) (Met1-Arg685) was expressed in baculovirus-insect cells and is used as calibrator in the kit.

Range: 0 ng/ml - 4000 ng/ml

Sensitivity: LOD < 60 ng/ml

Precision: Interassay : < 15 %,Intrassay : < 15 %



**DATA FROM THE TESTS CONDUCTED FOR VARIANT STUDIES:**

Sample (ng/ml)	Original Kit #KBVH015-10	UK- (N501Y)	SA- (K417N, E484K, N501Y)	Brazil- (E484K, K417T, N501Y)
0	0.103	0.079	0.071	0.078
62.5	0.231	0.049	0.05	0.029
125	0.358	0.094	0.097	0.069
250	0.588	0.194	0.196	0.14
500	0.948	0.412	0.38	0.304
1000	1.515	0.807	0.759	0.62
2000	2.227	1.523	1.437	1.185
4000	2.487	2.515	2.499	2.228

**UNIQUE SELLING POINTS FOR KRISHGEN ELISA:**

As other Krishgen ELISA, these kits are based on monoclonal antibody detection for better sensitivity. A sandwich ELISA design and specific antibodies allow for a robust ELISA. Features include a standard, ready-to-use protocol.

Validated for both serum and plasma samples.

No cross-reactivity with other respiratory pathogens.

Standardisation and reproducibility, with lot-to-lot consistency.

Validated against seven points for a gold ring standard quality ELISA, a marker for Krishgen quality.

*Currently, these ELISA are in stock for shipping within the week, ensuring swift supply to the customer.*