

Version : 02

Update : 05/14/2021

## DATASHEET

### **SARS-CoV-2 Spike protein (RBD, E484K, K417T, N501Y, Avi & His Tag)-HRP**

**Cat. No.:** Z03601-20; Z03601-100; Z03601-500;

Z03601-2

**Size:** 20µL/ 100µL/ 500µL /2mL

**Synonyms:** Lineage P.1; 20J/501Y.V3; VOC-

202101/02; Brazil(ian) variant.

**Source:** CHO

**Species:** SARS-CoV-2

**Biological Activity:** This protein is validated to bind with human ACE2 ([Cat. No. Z03516](#)) in functional ELISA assay.

**Application:** The optimal dilution ratio should be determined by the end user for specific applications.

ELISA 1:1000

**Sequence:** Accession#QHD43416.1( Arg319-Ser591)(E484K, K417T, N501Y)

**Molecular Weight:** 30 KDa (predicted on protein sequence)

**Tag:** C-terminus Avi & His tag

**Formulation:** Liquid

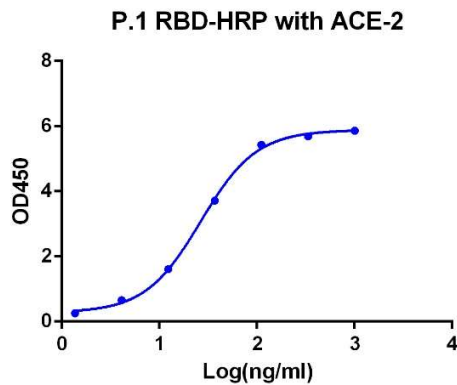
**Storage buffer:** PBS 7.4, 0.5% PC300

**Storage:** This product can be stable for 6 months at 2-8°C. Protect from light.

**Description:**

SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2) also known as 2019-nCoV (2019 Novel Coronavirus) is a virus that causes illnesses ranging from the common cold to severe diseases. Lineage P.1, also known as the Brazil(ian) variant is one of the variants of SARS-CoV-2. This variant has 17 amino acid changes, ten of which are in its spike protein, including these three designated to be of particular concern: N501Y, E484K and K417T.

## Data Images:



SARS-CoV-2 Spike protein (RBD, E484K, K417T, N501Y, Avi & His Tag)-HRP can bind with ACE-2 Fc Chimera, Human (Cat. No. Z03516) in a functional ELISA.

## References:

1. Variants: distribution of cases data. GOV.UK. Retrieved 27 February 2021.  
<https://www.gov.uk/government/publications/covid-19-variants-genomically-confirmed-case-numbers/variants-distribution-of-cases-data>
2. COVID-19: Virologist says Brazilian coronavirus variant detected in UK is not the one 'of concern'.  
<https://news.sky.com/story/covid-19-one-of-two-brazilian-coronavirus-variants-detected-in-uk-says-virologist-12188419>
3. Genomic characterisation of an emergent SARS-CoV-2 lineage in Manaus: preliminary findings.  
<https://virological.org/t/genomic-characterisation-of-an-emergent-sars-cov-2-lineage-in-manaus-preliminary-findings/586>

## Disclaimer:

Please note that we cannot guarantee that the only difference in binding you will see with the HRP labeled variants is based on the mutations. Some differences may be introduced by the fact that these variants may label differently with HRP compare to the wild type. And we have not validated them yet as drop-in replacement of the wild type in cPass kit. You may need to optimize and validate the performance of the modified assay. For example, the cutoff values should be determined by the specific assay performance by utilizing the HRP conjugated variant proteins.

**For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.**