OVODAN BIOTECH A/S
Havnegade 36 · DK-5000 Odense C

T +45 6611 1732
E: customerservice@ovodanbiotech.com
www.ovodanbiotech.com

VAT-no: DK 33 87 02 56

Product Datasheet

Cat. No: OBA0104

SARS CoV-2 Spike-RBD 319-541 recombinant protein,
Variant of the P.1 lineage

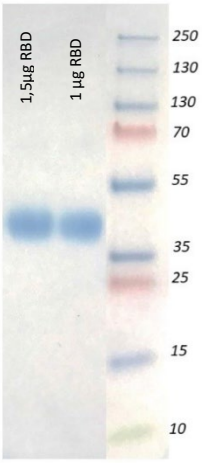
For research use only

Description:

SARS-CoV-2 Spike-RBD 319-541 variant P.1 (K417T, E484K, N501Y)
Expressed in HEK-cell Expi293F system. Protein carries a poly-his tag at the N-terminus.

Correct sequence confirmed by Mass Spectrometry, where full coverage of the sequence has been obtained.

Calculated MW: 27 kDa
Protein migrates as appox. 37 kDa due to glycosylations (See SDS-page beside).



Glycan structures are confirmed, and glycosylation sites identified by
Mass Spectrometry of protein samples with and without PNGaseF treatment.
(see detailed results below).

Identified glycosylation sites: N42(IT) and N54(AT).

Glycan structures have a combined mass of approx. 6 kDa.

Dimerization percentage < 10%

Formulation: In PBS solution pH=7.4

Purification: Immobilized metal affinity chromatography, NiNTA.

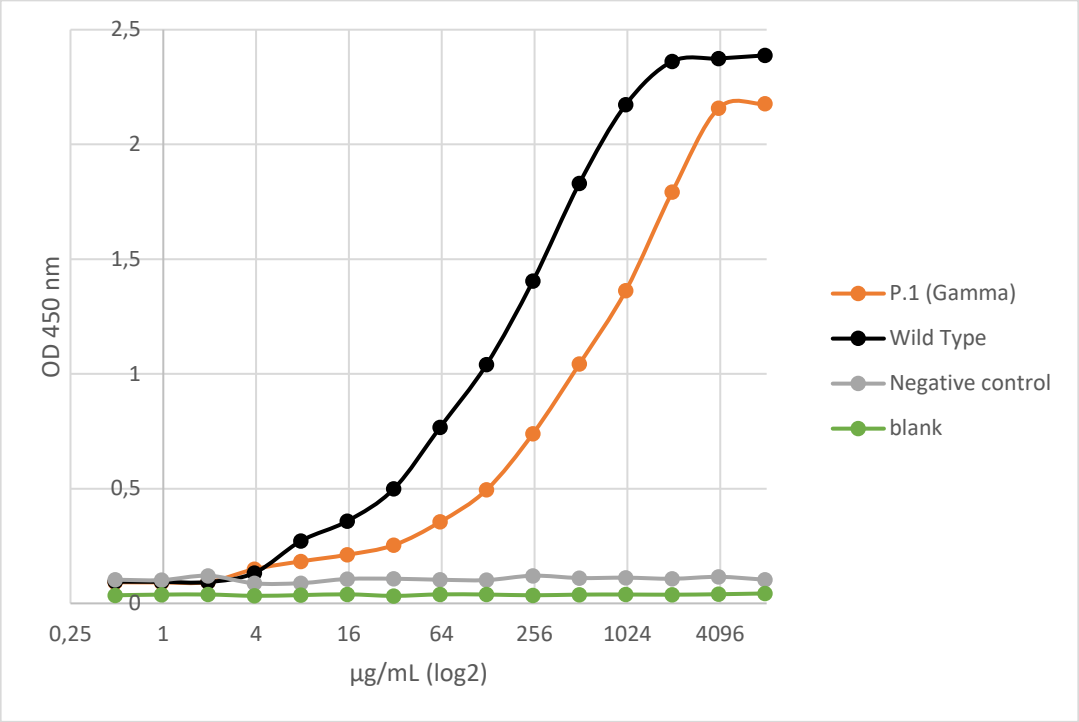
Purity: > 95% as determined by SDS-PAGE

Storage: Store at -70°C short term. Avoid freeze thaw cycles.

Bioactivity:

ELISA: High immunogenicity verified by immunization of hens.

The antigen shows strong antigenicity. Immobilized SARS-CoV-2 Spike RBD 319-541 P.1 recombinant protein at 1 µg/mL (100µL/well) binds chicken anti- SARS-CoV-2 Spike RBD 319-541 with a linear range between 256 to 1024 ng/mL antibody added over fixed antigen concertation coated on the well. Starting concentration of antibody normalized to 1 µg/mL.



Mass Spectrometry analysis:

The sequence for the variant has been confirmed by mass spectrometry analysis.
Calculated coverage without signal peptide is 92.2%. The missing peptide is caused by glycosylation's on NIT and/or NAT. The one region mutated in this variant is covered showing that the expressed protein matches the P.1 variant amino acid sequence.