

Anti-Spike protein (RBD) [Sb#15] Isoblend 100 ug Ab02013-46.0-ISS

This is an antibody blend consisting of equal amounts (by mass) of IgG1, IgG3, IgM and IgA. The total antibody concentration is 1 mg/ml, which each format being present at 0.25 mg/ml. Made with synthetic nanobody sequences licensed from the Seeger laboratory, University of Zurich.

This is a blend of IgG1, IgG3, IgM and IgA versions of Sb#15. Each antibody format is present at 0.25 mg/ml, for a total antibody concentration of 1 mg/ml.

Isotype and Format: Human IgG1/IgG3/IgM/IgA, Isoblend

Clone Number: Sb#15

Alternative Name(s) of Target: Receptor Binding Domain; SARS CoV 2 S glycoprotein; Sb15; COVID-19 Spike protein; RBD; Receptor Binding Domain; E2 glycoprotein; E2; Human coronavirus 2 spike glycoprotein; Peplomer protein; S glycoprotein; SARS coronavirus 2 S protein; SARS coronavirus 2 Spike Protein; SARS CoV 2 Spike protein; SARS CoV 2; SARS-CoV-2 S protein; SARSCoV2; SARS-COV-2 S protein; SARS-COV-2 Spike glycoprotein; SARSCOV2 Spike protein; Severe acute respiratory syndrome 2 spike glycoprotein; Severe acute respiratory syndrome virus 2 spike glycoprotein; Spike glycoprotein; 2019-nCoV; SARS-CoV2

UniProt Accession Number of Target Protein: P0DTC2

Published Application(s): grating-coupled interferometry, inhibition, therapeutics, ELISA

Published Species Reactivity: SARS Coronavirus 2 (SARS-Cov-2)

Immunogen: This clone was originally isolated in a form of a synthetic nanobody (sybody) via a 'target swap' selection procedure against RBD-vYFP using ribosomal display and against RBD-Fc fusion during phage display rounds.

Specificity: This antibody recognizes and binds the SARS CoV 2 C-terminal receptor binding domain (RBD) located in the extracellular portion of the spike protein.

Application Notes: This antibody is recommended for detection of SARS CoV 2 or 2019-nCoV. Its high specificity to the novel coronavirus was confirmed via ELISA testing (Walter et al., 2020). Furthermore, grating-coupled interferometry demonstrated that this antibody binds the receptor binding domain (RBD) of the spike protein with high affinity (Walter et al., 2020). Subsequent testing showed that this clone exhibits exceptionally strong inhibition of binding of SARS-Cov-2 RBD to hACE2, which is the receptor for the virus (signal of RBD association with hACE2 decreased over 90%) (Walter et al., 2020). This clone binds to a non-

overlapping epitope relative to S#68 (Ab02017) what can be used in development of anti-Covid-19 therapeutics granting together increased avidity to the spike protein (Walter et al., 2020).

Antibody First Published in: Walter et al. Sybodies targeting the SARS-CoV-2 receptor-binding domain BioRxiv (2020) [PMID:](#)

Note on publication: Describes the generation and characterization of the antibody.

Product Form

Size: 100 µg Isoblend products are precisely defined blends of IgG1, IgG3, IgM and IgA isotypes/subtypes. Each antibody format is present at 0.25 mg/ml, for a total antibody concentration of 1 mg/ml.

Purification: IgG1/IgG3 by protein A, IgM/IgA by recombinant lectin column

Supplied In: PBS with 0.02% Proclin 300

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.