

Anti-CoV2RBD-imd-hlgG1

Monoclonal human IgG1 antibody against SARS-CoV-2 Spike (REGN10987; Imdevimab)

Catalog code: srbdc4-mab1

<https://www.invivogen.com/sars2-spike-regn-mab>

For research use only, not for diagnostic or therapeutic use

Version 21J18-NJ

PRODUCT INFORMATION

Contents:

• 100 µg of Anti-CoV2RBD-imd-hlgG1, provided azide-free and lyophilized

Target: SARS-CoV-2 Spike receptor binding domain (S-RBD)

Source: CHO cells

Isotype: Human IgG1

Light chain type: Kappa

Clonality: Monoclonal

Purification: By affinity chromatography with protein G

Formulation: 0.2 µm filtered solution in a sodium phosphate buffer with glycine, saccharose, and stabilizing agents

Storage

- Product is shipped at room temperature. Store lyophilized antibody at -20 °C. Lyophilized product is stable for at least 1 year.

- Reconstituted antibody is stable for 1 month when stored at 4°C and for 1 year when aliquoted and stored at -20 °C. Avoid repeated freeze-thaw cycles.

Quality control

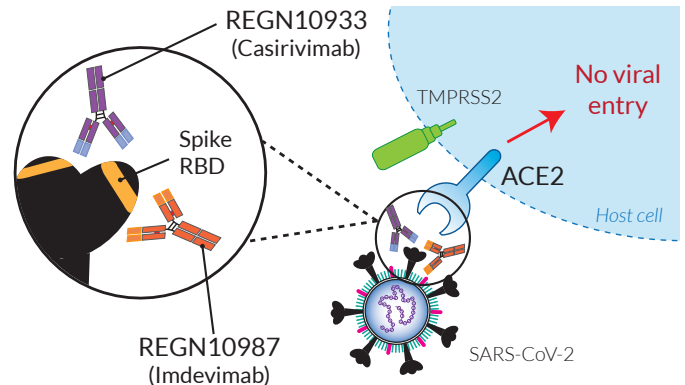
- The complete sequence of the antibody construct has been verified.
- Anti-CoV2RBD-imd-hlgG1 has been functionally validated by ELISA using Spike-RBD proteins derived from SARS-CoV-2 variants.
- Absence of bacterial contamination (e.g. lipoproteins and endotoxins) has been confirmed using HEK-Blue™ TLR2 and TLR4 cellular assays.

PRODUCT DESCRIPTION

Anti-CoV2RBD-imd-hlgG1 is derived from 'REGN10987', a recombinant SARS-CoV-2 neutralizing monoclonal antibody (mAb)¹. Anti-CoV2RBD-imd-hlgG1 features a variable region that is reactive against the receptor binding domain (RBD) of the Spike protein of SARS-CoV-2, and the constant region of the human IgG1 (hlgG1) isotype. Anti-CoV2RBD-imd-hlgG1 was generated by recombinant DNA technology, produced in CHO cells, and purified by affinity chromatography with protein G.

SARS-CoV-2 Spike RBD mAb (REGN10987; Imdevimab)

The SARS-CoV-2 Spike receptor-binding domain (S-RBD) is an important candidate for both treatment and vaccination strategies in the context of COVID-19. REGN10987 (aka Imdevimab) and REGN10933 (aka Casirivimab) mAbs were generated using both humanized mice and convalescent patients¹. These mAbs bind two distinct and non-overlapping regions of the SARS-CoV2 S-RBD, and potently block its binding to the ACE2 receptor on target cells¹. Treatment using a combination of these mAbs has been authorized under emergency use for COVID-19 outpatients²⁻⁴. Prophylactic and therapeutic administration of this mAb cocktail almost completely blocks the establishment of virus infection in non-human primates⁵



and enhances clearance of the virus in patients whose endogenous immune response has not yet been initiated².

APPLICATIONS

Anti-CoV2RBD-imd-hlgG1 can be used either alone or in antibody cocktails to assess its/their neutralization efficiency against SARS-CoV-2 variants. This tool can allow the monitoring of SARS-CoV-2 variant escape.

1. Hansen J. et al. 2020. Studies in humanized mice and convalescent humans yield a SARS-CoV-2 antibody cocktail. Science 369:1010-1014. 2. Weinreich D.M. et al., 2021. REGN-COV2, a Neutralizing Antibody Cocktail, in Outpatients with Covid-19. N Engl J Med. 384(3):238-251. 3. <https://www.fda.gov/media/145610/download>. 4. <https://www.ema.europa.eu/en/news/ema-issues-advice-use-regn-cov2-antibody-combination-casirivimab-imdevimab>. 5. Baum A. et al., 2020. REGN-COV2 antibodies prevent and treat SARS-CoV-2 infection in rhesus macaques and hamsters. Science 370:1110-1115.

METHODS

Anti-CoV2RBD-imd-hlgG1 resuspension (100 µg/ml)

Note: Ensure you see the lyophilized pellet before resuspension.

- Add 1 ml of sterile water to the vial and gently pipette until completely resuspended.

- Prepare aliquots and store at 4°C or -20°C until required.

RELATED PRODUCTS

Product	Catalog Code
Anti-CoV2RBD-cas-hlgG1	srbdc3-mab1
Anti-CoV2RBD-bam-hlgG1	srbdc5-mab1
Anti-CoV2RBD-ete-hlgG1	srbdc6-mab1
Spike-S1-Fc (D614G)	fc-sars2-s1g
A549-hACE2-TMPRSS2	a549-hace2tpsa

Note: For more products related to COVID-19 research, please visit our website <https://www.invivogen.com/covid-19>

TECHNICAL SUPPORT

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