

# Anti-CoV2RBD-ete-hlgG1

Monoclonal human IgG1 antibody against SARS-CoV-2 Spike (LY-CoV016; Etesevimab)

Catalog code: srbdc6-mab1-3

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

For research use only, not for diagnostic or therapeutic use

Version 23L11-MM

## PRODUCT INFORMATION

### Contents:

• 3 x 100 µg of Anti-CoV2RBD-ete-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.

- 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

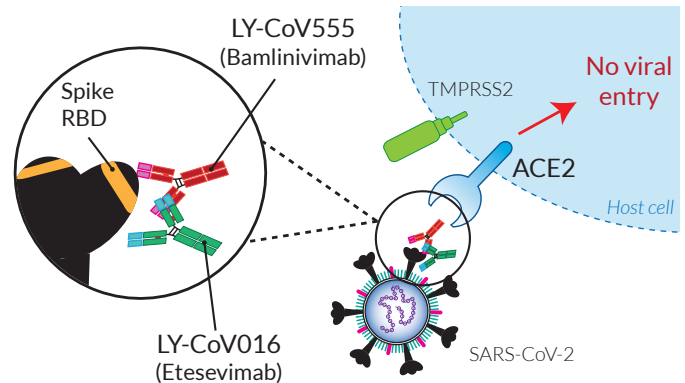
- The complete sequence of the antibody construct has been verified.  
- Anti-CoV2RBD-ete-hlgG1 has been functionally validated by ELISA using Spike-RBD proteins derived from SARS-CoV-2 variants.  
- Absence of bacterial contamination (e.g. lipoproteins and endotoxins) has been confirmed using HEK-Blue™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

## PRODUCT DESCRIPTION

Anti-CoV2RBD-ete-hlgG1 is derived from 'LY-CoV016', a recombinant SARS-CoV-2 neutralizing monoclonal antibody (mAb)<sup>1</sup>. Anti-CoV2RBD-ete-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-ete-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 (LY-CoV016; Etesevimab)

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. LY-CoV016 (aka Etesevimab) was generated using serum from a convalescent patient and was originally named 'clone CB6'<sup>1</sup>. This mAb has high-affinity for the SARS-CoV2 S-RBD and blocks its binding to the ACE2 receptor on target cells, thus displaying potent neutralizing activity<sup>1</sup>. It inhibits SARS-CoV-2 infection in non-human primates in both prophylactic and treatment settings<sup>1</sup>. A clinical trial (NCT04427501) is investigating the efficacy of LY-CoV016 in combination with another neutralizing mAb, LY-CoV555<sup>2</sup>. On the basis of the first results, this combination



treatment has been authorized under emergency use for COVID-19 outpatients<sup>3-5</sup>. Of note, LY-CoV016 and LY-CoV55 bind two distinct but overlapping regions of the SARS-CoV2 S-RBD<sup>5</sup>.

## APPLICATIONS

Anti-CoV2RBD-ete-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. Shi R. et al., 2020. A human neutralizing antibody targets the receptor-binding site of SARS-CoV-2. Nature. 584:120-124. 2. Gottlieb R.L. et al., 2021. Effect of Bamlinivimab as monotherapy or in combination with Etesevimab on viral load in patients with mild to moderate COVID-19: a randomized clinical trial. JAMA. 325:632-644. 3. <https://www.fda.gov/media/145801/download>. 4. <https://www.ema.europa.eu/en/news/ema-issues-advice-use-antibody-combination-bamlinivimab-etesevimab>. 5. Taylor P.C. et al., 2021. Neutralizing monoclonal antibodies for treatment of COVID-19. Nat Rev Immunol. 21:382-393.

## METHODS

### Anti-CoV2RBD-ete-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-bam-hlgG1	srbdc5-mab1-3
Anti-CoV2RBD-cas-hlgG1	srbdc3-mab1-3
Anti-CoV2RBD-imd-hlgG1	srbdc4-mab1-3
A549-hACE2-TMPRSS2	a549-hace2tpsa

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

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InvivoGen USA (Toll-Free): 888-457-5873

InvivoGen USA (International): +1 (858) 457-5873

InvivoGen Europe: +33 (0) 5-62-71-69-39

InvivoGen Asia: +852 3622-3480

E-mail: [info@invivogen.com](mailto:info@invivogen.com)