

Anti-CoV2RBD-bam-mlgG2a

Monoclonal mouse IgG2a antibody against SARS-CoV-2 Spike (LY-CoV555; Bamlanivimab)

Catalog code: srbdc5-mab10-3

<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-bam-mlgG2a, provided azide-free and lyophilized

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

Source: CHO cells

Isotype: Mouse IgG2a

Light chain type: Kappa

Clonality: Monoclonal

Purification: By affinity chromatography with protein A

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

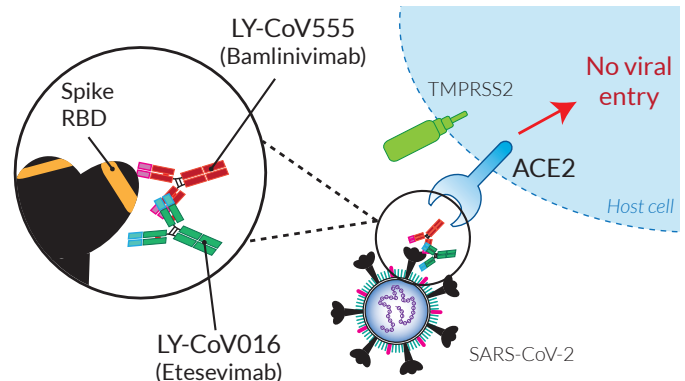
- The complete sequence of the antibody construct has been verified.
- Anti-CoV2RBD-bam-mlgG2a has been functionally validated by ELISA using Spike-RBD proteins derived from SARS-CoV-2 variants.
- Absence of bacterial contamination (e.g. lipoproteins and endotoxins) has been confirmed using HEK-Blue™ TLR2 and TLR4 cellular assays.

PRODUCT DESCRIPTION

Anti-CoV2RBD-bam-mlgG2a is derived from 'LY-CoV555', a recombinant SARS-CoV-2 neutralizing monoclonal antibody (mAb)¹. Anti-CoV2RBD-bam-mlgG2a 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 mouse IgG2a (mlgG2a) isotype. Anti-CoV2RBD-bam-mlgG2a was generated by recombinant DNA technology, produced in CHO cells, and purified by affinity chromatography with protein A.

SARS-CoV-2 Spike RBD mAb (LY-CoV555; Bamlanivimab)

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-CoV555 (aka Bamlanivimab) was generated using serum from a convalescent patient¹. 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 activity¹. Prophylactic administration of LY-CoV555 protects against SARS-CoV-2 infection in non-human primates¹. Treatment using LY-CoV555 has been authorized under emergency use for COVID-19 outpatients^{2,3}. In addition, a clinical trial (NCT04427501) is investigating the efficacy of LY-CoV555 in



combination with another neutralizing mAb, LY-CoV016. Of note, LY-CoV555 and LY-CoV016 bind two distinct but overlapping regions of the SARS-CoV2 S-RBD⁴.

APPLICATIONS

Anti-CoV2RBD-bam-mlgG2a 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. Jones B.E. *et al.*, 2021. The neutralizing antibody, LY-CoV555, protects against SARS-CoV-2 infection in nonhuman primates. *Sci Transl Med* 13(593), eabf1906(2021).
2. Chen P. *et al.*, 2020. SARS-CoV-2 Neutralizing Antibody LY-CoV555 in Outpatients with Covid-19. *N Engl J Med.* 384(3):229-237.
3. <https://www.fda.gov/media/145801/download>.
4. Taylor P.C. *et al.*, 2021. Neutralizing monoclonal antibodies for treatment of COVID-19. *Nat Rev Immunol.* 21(6):382-393.

METHODS

Anti-CoV2RBD-bam-mlgG2a 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-ete-mlgG2a	srbdc6-mab10-3
Anti-CoV2RBD-cas-mlgG2a	srbdc3-mab10-3
Anti-CoV2RBD-imd-mlgG2a	srbdc4-mab10-3
A549-hACE2-TMPRSS2	a549-hace2tps

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

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