

# MonoRab™ SARS-CoV-2 Neutralizing Antibody (BS-R2B2), mAb, Rabbit

Cat. No.: A02051

## Overview

<b>Specificity</b>	The product is specific for SARS-CoV-2 Spike Protein S1 subunit and its RBD domain. <i>The product can recognize and neutralize Wild-Type SARS-CoV-2 and five Variants of Concern (VOC) including Alpha, Beta, Gamma, Delta, and Omicron.</i>
<b>Host Species</b>	Rabbit
<b>Immunogen</b>	Recombinant SARS-CoV-2 Spike protein fragment
<b>Conjugate</b>	Unconjugated

## Applications

Working concentrations for specific applications should be determined by the investigators. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

<b>Application</b>	<b>Recommended Usage</b>
ELISA	0.01-0.1 µg/ml
Flow Cytometry	10 µg/ml
Surrogate Virus Neutralization Test (sVNT)	0.1-1 µg/ml

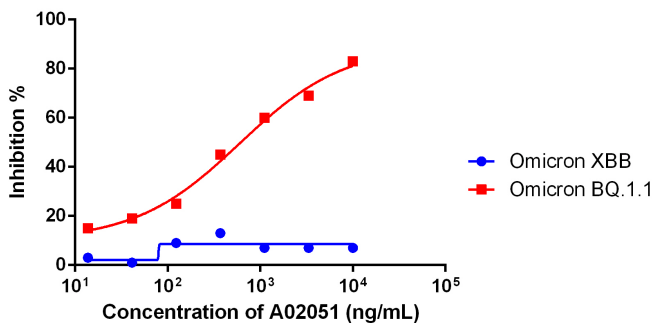
## Properties

<b>Form</b>	Liquid
<b>Storage Buffer</b>	0.2 µm filtered solution in PBS, pH 7.4
<b>Concentration</b>	1 mg/ml
<b>Storage Instructions</b>	Store at -20°C. This product is stable for 1 year upon receipt, when handled and stored as instructed. Avoid repeated freezing and thawing cycles.

<b>Purification</b>	Protein A affinity column
<b>Isotype</b>	Rabbit IgG
<b>Clonality</b>	Monoclonal
<b>Clone ID</b>	BS-R2B2
<b>Note</b>	GenScript can customize this product per customer's request including product size, buffer components, etc.

## Examples

Neutralization activity against SARS-CoV-2 Omicron XBB and BQ.1.1 Variants by A02051

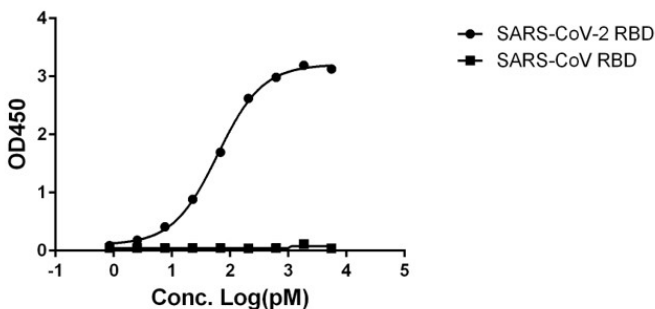


Dose-response curve of MonoRab™ SARS-CoV-2 Neutralizing Antibody (BS-R2B2), mAb, Rabbit (GenScript, A02051) on SARS-CoV-2 Multiplex sVNT.

The final concentration of RBD recombinant proteins were 60 ng/mL. MonoRab™ SARS-CoV-2 Neutralizing Antibody (BS-R2B2), mAb, Rabbit (GenScript, A02051) dilutions started from 10 µg/mL.

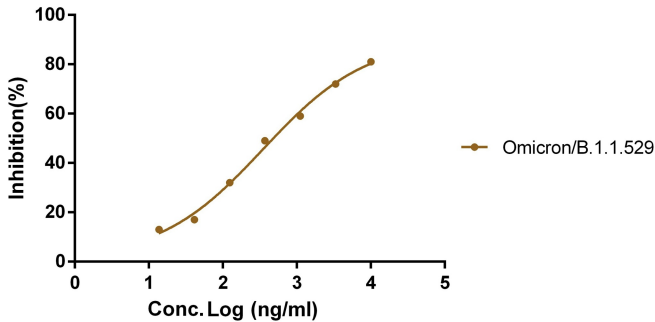
MonoRab™ SARS-CoV-2 Neutralizing Antibody (BS-R2B2), mAb, Rabbit (GenScript, A02051) can block the binding of SARS-CoV-2 omicron BQ.1.1 variant to Human ACE2, but it does not block the binding of XBB variant to Human ACE2.

MonoRab™ SARS-CoV-2 Neutralizing Antibody (BS-R2B2)



ELISA binding of MonoRab™ SARS-CoV-2 Neutralizing Antibody (BS-R2B2), mAb, Rabbit (GenScript, A02051) with recombinant SARS-CoV-2 Spike Protein S1 RBD (GenScript, Z03483) and SARS-CoV RBD.

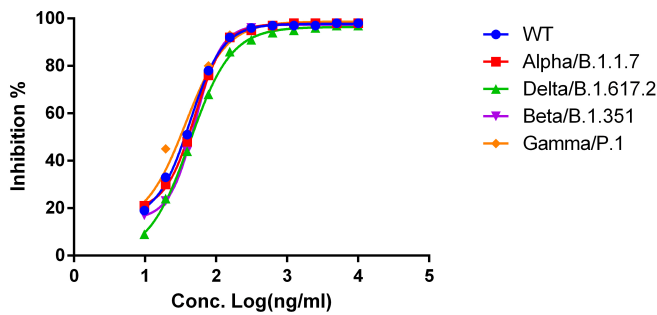
### Neutralization activity against Omicron variant by BS-R2B2 (GenScript, A02051)



MonoRab™ SARS-CoV-2 Neutralizing Antibody (BS-R2B2), mAb, Rabbit (GenScript, A02051) blocks SARS-CoV-2 Omicron RBD binding with Human ACE2 recombinant protein by sVNT.

SARS-CoV-2 S-RBD Omicron/B.1.1.529 (GenScript, [Z03728](#)) MonoRab™ SARS-CoV-2 Neutralizing Antibody (BS-R2B2), mAb, Rabbit dilution start from 10 µg/ml.

### Inhibition of SARS-CoV-2 Neutralizing Antibody (BS-R2B2), mAb, Rabbit

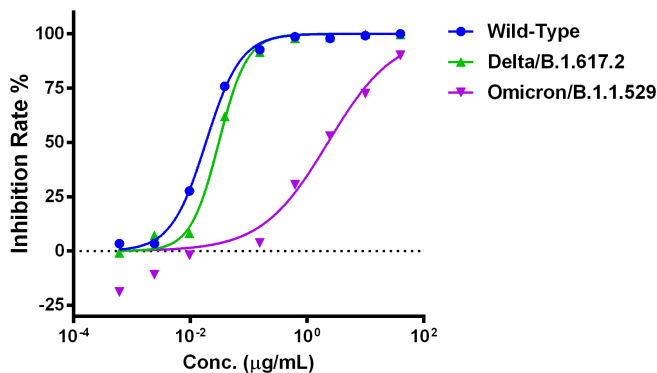


MonoRab™ SARS-CoV-2 Neutralizing Antibody (BS-R2B2), mAb, Rabbit (GenScript, A02051) blocks SARS-CoV-2 wild-type and VOC RBDs binding with Human ACE2 recombinant protein by sVNT.

SARS-CoV-2 S-RBD WT (GenScript, [Z03483](#))  
 SARS-CoV-2 S-RBD Alpha/B.1.1.7 (GenScript, [Z03533](#))  
 SARS-CoV-2 S-RBD Beta/B.1.351 (GenScript, [Z03537](#))  
 SARS-CoV-2 S-RBD Gamma/P.1 (GenScript, [Z03600](#))  
 SARS-CoV-2 S-RBD Delta/B.1.617.2 (GenScript, [Z03613](#))

MonoRab™ SARS-CoV-2 Neutralizing Antibody (BS-R2B2), mAb, Rabbit dilution start from 10 µg/ml.

### Dose response curves of A02051 on pVNT

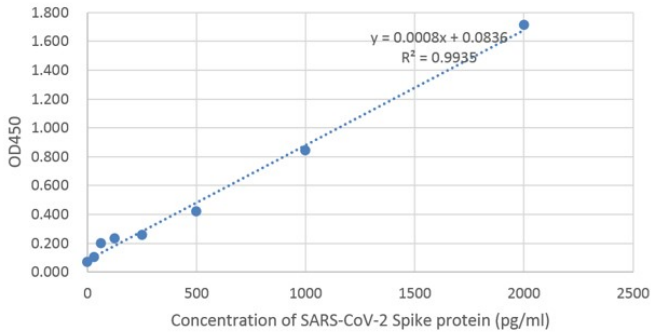


Pseudovirus Neutralization Test of SARS-CoV-2 pseudovirus-hACE2 interaction with MonoRab™ SARS-CoV-2 Neutralizing Antibody (BS-R2B2), mAb, Rabbit (GenScript, A02051).

Control: HEK293/ACE2 cells were infected with SARS-CoV-2 pseudovirus  
 SARS-CoV-2 Pseudovirus Neutralization Assay kit\_Luc reporter (GenScript, [SC2087A](#))  
 SARS-CoV-2 B.1.617.2 (Delta) Pseudovirus Neutralization Assay kit\_Luc reporter (GenScript, [SC2087V](#))  
 SARS-CoV-2 B.1.1.529 (Omicron) Pseudovirus Neutralization Assay kit\_Luc reporter (GenScript, [SC2087-027](#))

MonoRab™ SARS-CoV-2 Neutralizing Antibody (BS-R2B2), mAb, Rabbit (GenScript, A02051) dilutions start from 40 µg/ml.

Standard Curve of SARS-CoV-2 Spike protein Sandwich ELISA



Standard curve of SARS-CoV-2 Spike Protein Sandwich ELISA. The SARS-CoV-2 Spike Protein Sandwich ELISA assay is developed by using MonoRab™ SARS-CoV-2 Spike S1 Antibody (BS-R2B12), mAb, Rabbit (GenScript, A02058) and MonoRab™ SARS-CoV-2 Neutralizing Antibody (BS-R2B2), mAb, Rabbit (GenScript, A02051) as the capture and detection antibodies, respectively.

In this ELISA assay, MonoRab™ SARS-CoV-2 Neutralizing Antibody (BS-R2B2), mAb, Rabbit (GenScript, A02051) was labeled with HRP.

The sensitivity of detecting SARS-CoV-2 spike protein is up to 60 pg/ml.

## Background

**Target Background :** SARS-CoV-2 (Severe acute respiratory syndrome coronavirus 2), also known as 2019-nCoV, is a positive-sense single-stranded RNA virus. It caused coronavirus disease 2019 (COVID-19). SARS-CoV-2 contains glycosylated spike (S) protein, which is composed of S1 subunit and S2 subunit. The S1 contains a receptor-binding domain (RBD) that can bind to ACE2 receptor on target cells.

**Synonyms :** 2019-nCoV Neutralizing Antibody, mAb, Rabbit

**For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.**