

Rev06 DATASHEET

Update: Oct,19,2022

# SARS-CoV-2 Neutralizing Antibody (R323IgM), Human Chimeric

Cat. No.: A02088

#### **Overview**

Specificity	The product is specific for SARS-CoV-2 Spike Protein S1 subunit and its RBD domain.  The product can recognize and neutralize Wild-Type SARS-CoV-2 and Variants of Concern (VOC) including Alpha, Beta, Delta, and Omicron. Reactivity with Gamma variant has not been tested.
<b>Host Species</b>	Human
Immunogen	Recombinant SARS-CoV-2 RBD Protein
Conjugate	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.

Application	Recommended Usage
ELISA	0.05-1 μg/ml
Surrogate Virus Neutralization Test (sVNT)	0.1-1 μg/ml

### **Properties**

Form	Liquid
Storage Buffer	Supplied in 0.2 μm filtered PBS, pH 7.2
Concentration	1 mg/ml
Storage Instructions	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.

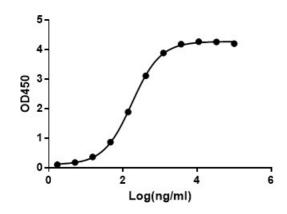
#### GenScript USA, Inc.



Purification	Affinity chromatography
Isotype	Recombinant human IgM
Clonality	Monoclonal
Clone ID	R323IgM
Note	GenScript can customize this product per customer's request including product size, buffer components, etc.

## **Examples**

#### A02088 ELISA binding with RBD

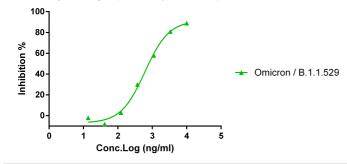


ELISA binding of SARS-CoV-2 Neutralizing Antibody (R323IgM), Human Chimeric (GenScript, A02088) with SARS-CoV-2 S1 RBD (GenScript, Z03483).

Coating antigen: RBD, 2 μg/ml.

SARS-CoV-2 Neutralizing Antibody (R323IgM), Human Chimeric (GenScript, A02088) dilution start from 1,000 ng/ml.  $EC_{50}$ = 174.8 ng/ml.

# Neutralization activity against Omicron variant by R323IgM (GenScript, A02088)

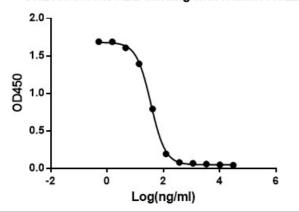


SARS-CoV-2 Neutralizing Antibody (R323IgM), Human Chimeric (GenScript, A02088) blocks SARS-CoV-2 Omicron RBD binding with Human ACE2 recombinant protein by sVNT.

SARS-CoV-2 S-RBD Omicron/B.1.1.529 (GenScript, Z03728) SARS-CoV-2 Neutralizing Antibody (R323IgM), Human Chimeric dilution start from 10  $\mu$ g/ml.



#### A02088 blocks RBD binding with Human ACE2

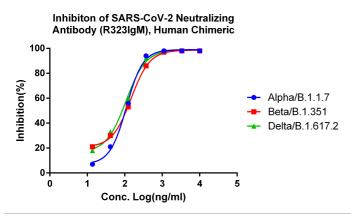


SARS-CoV-2 Neutralizing Antibody (R323IgM), Human Chimeric (GenScript, A02088) blocks SARS-CoV-2 S1 RBD binding with Human ACE2 recombinant protein.

Coating antigen: ACE2, 2 μg/ml.

RBD (GenScript, Z03483) final concentration: 50 ng/ml SARS-CoV-2 Neutralizing Antibody (R323IgM), Human Chimeric (GenScript, A02088) dilution start from 30 µg/ml.

 $IC_{50} = 35.76 \text{ ng/ml}$ 



SARS-CoV-2 Neutralizing Antibody (R323IgM), Human Chimeric (GenScript, A02088) blocks SARS-CoV-2 VOC RBDs binding with Human ACE2 recombinant protein by sVNT.

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 Delta/B.1.617.2 (GenScript, Z03613)

SARS-CoV-2 Neutralizing Antibody (R323IgM), Human Chimeric dilution start from 10 μg/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. SARS-CoV-2 Neutralizing Antibody (R323IgM), Human Chimeric is produced from cell culture in vitro under conditions free from animal-derived components.

**Synonyms:** 2019-nCoV Neutralizing IgM Antibody, SARS-CoV-2 S1 RBD IgM antibody.

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