

# MonoRab™ SARS-CoV-2 Spike (417N) Neutralizing Antibody (21F1), mAb, Rabbit

Cat. No.: A02140

## Overview

<b>Specificity</b>	GenScript MonoRab™ SARS-CoV-2 Spike (417N) Neutralizing Antibody (21F1), mAb, Rabbit is specific for 417N site of B.1.351 (SARS-CoV-2 Beta VOC) RBD. This product can recognize RBD single mutant (K417N) and RBD triple mutant (K417N, E484K, and N501Y), but can't recognize the wild type RBD, RBD single mutant (N501Y), and RBD single mutant (E484K).
<b>Host Species</b>	Rabbit
<b>Immunogen</b>	SARS-CoV-2 Spike RBD protein (E484K, K417N, N501Y)
<b>Species Reactivity</b>	VOC: SARS-CoV-2 Beta
<b>Conjugate</b>	Unconjugated

## Applications

Working concentrations for specific applications should be determined by the investigator. 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.

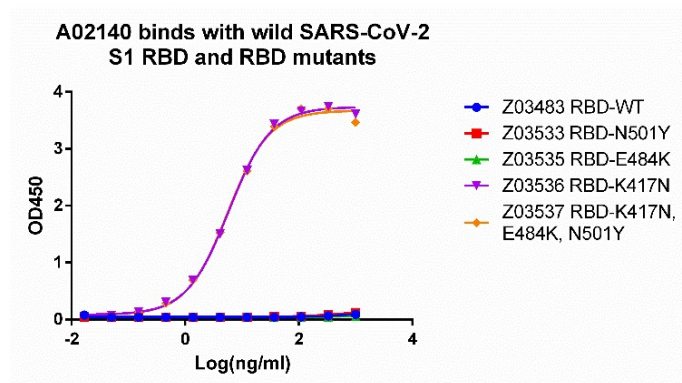
<b>Application</b>	<b>Recommended Usage</b>
ELISA	0.001-0.1 µg/ml
Surrogate Virus Neutralization Test (sVNT)	0.1-1 µg/ml

## Properties

<b>Form</b>	Liquid
<b>Storage Buffer</b>	Supplied in 0.2 µm filtered PBS, pH 7.2.
<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 chromatograph
<b>Isotype</b>	Rabbit IgG
<b>Clonality</b>	Monoclonal
<b>Clone ID</b>	21F1
<b>Note</b>	GenScript can customize this product per customer's request including product size, buffer components, etc.

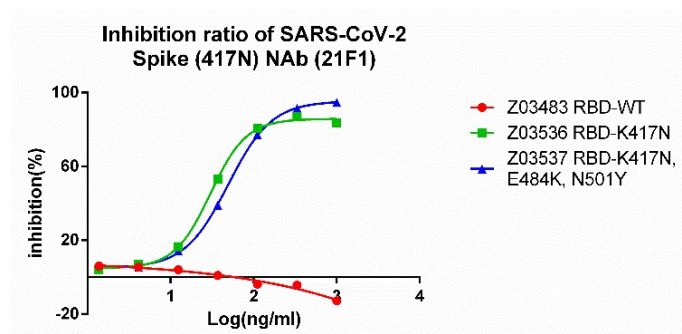
## Examples



ELISA binding of SARS-CoV-2 Spike (417N) Neutralizing Antibody (21F1) (GenScript, A02140) with wild-type SARS-CoV-2 S1-RBD and SARS-CoV-2 S1-RBD mutants.

Coating antigen:

SARS-CoV-2 S-RBD WT (GenScript, Z03483) 2 µg/ml;  
 SARS-CoV-2 S-RBD N501Y (GenScript, Z03533) 2 µg/ml;  
 SARS-CoV-2 S-RBD E484K (GenScript, Z03535) 2 µg/ml;  
 SARS-CoV-2 S-RBD K417N (GenScript, Z03536) 2 µg/ml;  
 SARS-CoV-2 S-RBD K417N+E484K+N501Y (GenScript, Z03537) 2 µg/ml;  
 SARS-CoV-2 Spike (417N) Neutralizing Antibody (21F1) (GenScript, A02140) dilution start from 1 µg/ml;  
 Mouse Anti-Rabbit IgG Fc Antibody [HRP], mAb (GenScript, A01856) 25ng/ml.



SARS-CoV-2 Spike (417N) Neutralizing Antibody (21F1) (GenScript, A02140) blocks SARS-CoV-2 S1 RBD binding with Human ACE2 recombinant protein.

Coating antigen: THE™ His Tag Antibody, mAb, Mouse (GenScript, A00186), 2 µg/ml.

ACE2-HRP, 200 ng/ml.

SARS-CoV-2 S-RBD final concentration:

SARS-CoV-2 S-RBD WT (GenScript, Z03483) 40 ng/ml;  
 SARS-CoV-2 S-RBD B.1.351/K417N (GenScript, Z03536) 40 ng/ml;  
 SARS-CoV-2 S-RBD B.1.351/ K417N+E484K+ N501Y (GenScript, Z03537) 40 ng/ml.  
 SARS-CoV-2 Spike (417N) Neutralizing Antibody (21F1) (GenScript, A02140) dilutions starting from 1 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 in 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. Lineage B.1.351 (a.k.a. 20H/501Y.V2) is a variant of SARS-CoV-2 (Beta variant). It has multiple mutations in the S1 RBD, including K417N, E484K, N501Y.

**Synonyms :** 2019-nCoV RBD (417N) Neutralizing Antibody, SARS-CoV-2 RBD 417N specific Neutralizing antibody, SARS-CoV-2 lineage B.1.351 (Beta variant) specific Neutralizing antibody.

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