

SARS-CoV-2 ADE-Causing Antibody (S9HC)

Cat. No.: A02133

Overview

Specificity	GenScript SARS-CoV-2 ADE-Causing Antibody (S9HC) reacts with SARS-CoV-2 Spike protein of wild type and delta variant. It can obviously enhance the SARS-COV-2 binding with ACE2.
Host Species	Humanized
Immunogen	SARS-CoV-2 Spike protein
Species Reactivity	Not applicable
Conjugate	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.

Application	Recommended Usage
ELISA	0.01-1 µg/ml

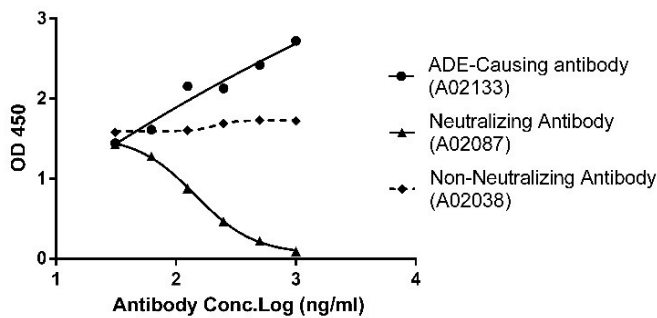
Properties

Form	Liquid
Storage Buffer	PBS, pH 7.2, Azide free
Concentration	1 mg/ml
Endotoxin Level	< 10 EU/mg
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.
Purification	Affinity chromatography

Isotype	Recombinant human IgG1
Clonality	Monoclonal
Clone ID	S9HC

Examples

Binding assay of SARS-COV-2 (Delta) to ACE2 mediated by antibodies

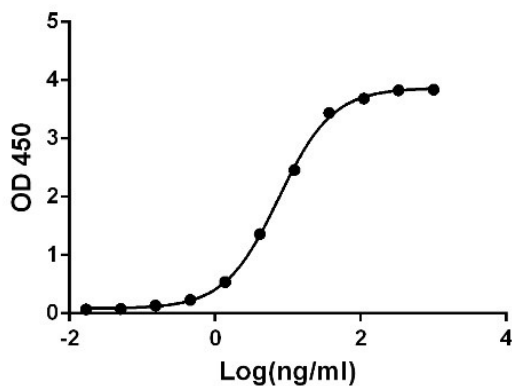


Binding assay of SARS-COV-2 (Delta) to ACE2 mediated by antibodies

First, recombinant SARS-CoV-2 Delta spike protein (S1, His Tag) (GenScript, Z03612) was coated on the plate. Then, ADE-Causing antibody (GenScript, A02133), neutralizing antibody (GenScript, A02087) or non-neutralizing antibody (GenScript, A02038) were added to the wells after gradient dilution. Last, HRP conjugated ACE2 protein was added to the well to form the signals.

The result indicated that SARS-CoV-2 ADE-Causing Antibody (S9HC) (A02133) could enhance SARS-CoV-2 Delta spike protein binding with ACE2 compared with A02087 and A02038 which proved the ADE effect.

A02133 binds with SARS-CoV-2 Spike protein



ELISA binding of SARS-CoV-2 ADE-Causing Antibody (S9HC) (GenScript, A02133) with recombinant SARS-CoV-2 Spike protein (ECD, His & Flag Tag) (GenScript, Z03481).

Coating antigen: SARS-CoV-2 Spike protein (ECD), 1 µg/ml.
 SARS-CoV-2 ADE-Causing Antibody (S9HC) (GenScript, A02133) dilution start from 1 µg/ml.

Background

Target Background : SARS-CoV-2 ADE-causing antibody is a SARS-CoV-2 Spike protein antibody that can exacerbate the COVID-19 disease severity of patients. Antibody-dependent enhancement (ADE) may be involved in the clinical observation of patients with increased severity of symptoms and high levels of SARS-CoV-2 antibodies. It is reported [1] that the same antibodies against the NTD domain of the SARS-CoV-2 spike protein have an ADE effect by increasing the binding of ACE2 to the spike protein.

Synonyms : Anti-SARS-CoV-2 ADE-Causing Antibody; SARS-CoV-2 Antibody-dependent enhancement Antibody; SARS-CoV-2 ADE response Antibody; SARS-CoV-2 Spike Antibody; SARS-CoV-2 ADE effect.

Reference : [1] Liu Y, Soh W T, Kishikawa J I, et al. An infectivity-enhancing site on the SARS-CoV-2 spike protein targeted by antibodies. 2021.

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