



# SARS-CoV Envelope Antibody

Cat. No.: 3533

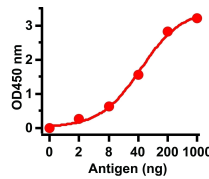


Figure 1 ELISA Test

Antibodies: SARS-CoV Envelope Antibody, 3533 (1 µg/mL). A sandwich ELISA was performed using immunogen as coating antigen and the anti-SARS-CoV Envelope antibody as the capture antibody. Secondary: Goat anti-ra

## Ψ Specifications

<b>HOST SPECIES:</b>	Rabbit
<b>SPECIES REACTIVITY:</b>	Virus
<b>HOMOLOGY:</b>	Predicted reactivity based on immunogen sequence: SARS-CoV-2 Envelope protein: (identity 82%, homology 91%)
<b>IMMUNOGEN:</b>	Anti-SARS-CoV Envelope antibody ( <b>3533</b> ) was raised against a peptide corresponding to 11 amino acids near the carboxy terminus of SARS-CoV Envelope protein.  The immunogen is located within the last 50 amino acids of SARS-CoV Envelope.
<b>TESTED APPLICATIONS:</b>	ELISA
<b>APPLICATIONS:</b>	SARS-CoV Envelope antibody can be used for the detection of SARS-CoV Envelope protein in ELISA. It will detect 5 ng of free peptide at 1 µg/mL.

## Ψ Properties

<b>PURIFICATION:</b>	SARS-CoV Envelope Antibody is affinity chromatography purified via peptide column.
<b>CLONALITY:</b>	Polyclonal
<b>ISOTYPE:</b>	IgG
<b>CONJUGATE:</b>	Unconjugated

<b>PHYSICAL STATE:</b>	Liquid
<b>BUFFER:</b>	SARS-CoV Envelope Antibody is supplied in PBS containing 0.02% sodium azide.
<b>CONCENTRATION:</b>	1 mg/mL
<b>STORAGE CONDITIONS:</b>	SARS-CoV Envelope antibody can be stored at 4 °C for three months and -20 °C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

## Ψ Additional Info

<b>OFFICIAL SYMBOL:</b>	E
<b>ALTERNATE NAMES:</b>	SARS-CoV Envelope Antibody: sM, 4, Envelope small membrane protein, E protein
<b>ACCESSION NO.:</b>	P59637
<b>PROTEIN GI NO.:</b>	30173401
<b>GENE ID:</b>	1489671
<b>USER NOTE:</b>	Optimal dilutions for each application to be determined by the researcher.

## Ψ Background and References

<b>BACKGROUND:</b>	SARS Envelope Antibody: A novel coronavirus has recently been identified as the causative agent of SARS (Severe Acute Respiratory Syndrome). Coronaviruses are a major cause of upper respiratory diseases in humans. The genomes of these viruses are positive-stranded RNA approximately 27-31kb in length. SARS infection can be mediated by the binding of the viral spike protein, a glycosylated 139 kDa protein and the major surface antigen of the virus, to the angiotensin-converting enzyme 2 (ACE2) on target cells. This binding can be blocked by a soluble form of ACE2. Envelope protein is a small polypeptide that contains at least one $\alpha$ -helical transmembrane domain. It involves in several aspects of the virus's life cycle, such as assembly, budding, envelope formation, and pathogenesis. E protein has membrane permeabilizing activity, which provides a possible rationale to inhibit in vitro ion channel activity of some synthetic coronavirus E proteins, and also viral replication.
<b>REFERENCES:</b>	1) Marra et al. Science 2003;300:1399-404.
	2) Rota et al. Science 2003;300:1394-9.
	3) Navas-Nartin et al. J Neurovirol. 2004;10:75-85.
	4) Pervushin et al. PLoS Pathog. 2009; 5(7): e1000511.

## Ψ CITATIONS

<b>CITATIONS:</b>	1)Siu, et al. The M, E, and N structural proteins of the severe acute respiratory syndrome coronavirus are required for efficient assembly, trafficking, and release of virus-like particles. J Virol. 2008 Nov;82(22):11318-30. doi: 10.1128/JVI.01052-08. Epub 2008 Aug 27.PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/18753196/">18753196</a>
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