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SARS Envelope Antibody

Catalog # ASC10328

Product Information

Application	E
Primary Accession	P59637
Other Accession	P59637, 30173401
Reactivity	Virus
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	8361
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	SARS envelope antibody can be used for the detection of SARS envelope protein in ELISA. It will detect 10 ng of free peptide at 1 □g/mL.

Additional Information

Other Names	SARS Envelope Antibody: sM, 4, Envelope small membrane protein, E protein, Envelope small membrane protein
Target/Specificity	E;
Reconstitution & Storage	SARS Envelope antibody can be stored at 4℃ for three months and -20℃, 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.
Precautions	SARS Envelope Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	E {ECO:0000255|HAMAP-Rule:MF_04204}
Synonyms	sM
Function	Plays a central role in virus morphogenesis and assembly. Acts as a viroporin and self-assembles in host membranes forming pentameric protein-lipid pores that allow ion transport. Also plays a role in the induction of apoptosis (By similarity). Activates the host NLRP3 inflammasome, leading to IL-1beta overproduction.
Cellular Location	Host endoplasmic reticulum-Golgi intermediate compartment. Host Golgi apparatus membrane {ECO:0000255|HAMAP-Rule:MF_04204, ECO:0000269|PubMed:21450821, ECO:0000269|PubMed:24788150};

Single-pass type III membrane protein {ECO:0000255|HAMAP-Rule:MF_04204}. Note=Colocalizes with S in the host endoplasmic reticulum-Golgi intermediate compartment (PubMed:20861307) The cytoplasmic tail functions as a Golgi complex-targeting signal {ECO:0000255|HAMAP-Rule:MF_04204, ECO:0000269|PubMed:20861307, ECO:0000269|PubMed:21450821}

Background

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.

References

Marra MA, Jones SJ, Astell CR, et al. The Genome sequence of the SARS-associated corona virus. Science 2003;300:1399-404.
Rota PA, Oberste MS, Monroe SS, et al. Characterization of a novel coronavirus associated with severe acute respiratory syndrome. Science 2003;300:1394-9.
Navas-Nartin SR and Weiss S. Coronavirus replication and pathogenesis: Implications for the recent outbreak of severe acute respiratory syndrome (SARS), and the challenge for vaccine development. J Neurovirol. 2004;10:75-85.
Arbely E, Khattari Z, Brotons G, et al. A highly unusual palindromic transmembrane helical hairpin formed by SARS coronavirus E protein. J Mol. Biol. 2004;3414:769-79.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.