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SARS virus PUP4 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP6004b

Specification

SARS virus PUP4 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession	P59635
Other Accession	NP_828857

SARS virus PUP4 Antibody (N-term) Blocking Peptide - Additional Information

Other Names
Protein 7a, Accessory protein 7a, Protein U122, Protein X4, 7a

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6004b was selected from the N-term region of human SARS virus PUP4 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SARS virus PUP4 Antibody (N-term) Blocking Peptide - Protein Information

Name 7a

Function
Plays a role as antagonist of host tetherin (BST2), disrupting its antiviral effect. Acts by binding to BST2 thereby interfering with its glycosylation. May suppress small interfering RNA (siRNA). May bind to host ITGAL, thereby playing a role in attachment or modulation of leukocytes.

Cellular Location
Virion. Host endoplasmic reticulum membrane; Single-pass membrane protein. Host endoplasmic reticulum-Golgi intermediate compartment membrane; Single-pass type I membrane protein Host Golgi apparatus membrane; Single-pass membrane protein

SARS virus PUP4 Antibody (N-term) Blocking Peptide - Protocols

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Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

SARS virus PUP4 Antibody (N-term) Blocking Peptide - Images

SARS virus PUP4 Antibody (N-term) Blocking Peptide - Background

An outbreak of atypical pneumonia, referred to as severe acute respiratory syndrome (SARS) and first identified in Guangdong Province, China, has spread to several countries. The severity of this disease is such that the mortality rate appears to be ~3 to 6%. A number of laboratories worldwidehave undertaken the identification of the causative agent. The National Microbiology Laboratory in Canada obtained the Tor2 isolate from a patient in Toronto, and succeeded in growing a coronavirus-like agent in AfricanGreen Monkey Kidney (Vero E6) cells. This coronavirus has been named publicly by the World Health Organization and member laboratories as ?SARS virus?.The SARS membrane proteins, including the major proteins S (Spike) and M (Membrane), are inserted into the endoplasmic reticulum Golgi intermediate compartment (ERGIC) while full length replicated RNA (+ strands) assemble with the N (nucleocapsid) protein. The virus then migrates through the Golgi complex and eventually exits the cell, likely by exocytosis. The site of viral attachment to the host cell resides within the S protein.Oligomeric spike (S) glycoproteins extend from SARS membranes. These integral membrane proteins assemble within the endoplasmic reticulum of infected cells and are subsequently endoproteolyzed in the Golgi, generating noncovalently associated S1 and S2 fragments. Once on the surface of infected cells and virions, peripheral S1 fragments bind carcinoembryonic antigen-related cell adhesion molecule (CEACAM) receptors, and this triggers membrane fusion reactions mediated by integral membrane S2 fragments.

SARS virus PUP4 Antibody (N-term) Blocking Peptide - References

He, R., et al., Biochem. Biophys. Res. Commun. 316(2):476-483 (2004).Snijder, E.J., et al., J. Mol. Biol. 331(5):991-1004 (2003).Marra, M.A., et al., Science 300(5624):1399-1404 (2003).