

SARS virus PUP1 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP6001b

Specification

SARS virus PUP1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession [P59632](#)

SARS virus PUP1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 1489669

Other Names

Protein 3a, Accessory protein 3a, Protein U274, Protein X1, 3a

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP6001b](#) was selected from the C-term region of human SARS virus PUP1 . 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 PUP1 Antibody (C-term) Blocking Peptide - Protein Information

Name 3a

Function

SARS virus PUP1 Antibody (C-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 worldwide have 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 African Green 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 PUP1 Antibody (C-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

Forms homotetrameric potassium sensitive ion channels (viroporin) and may modulate virus release. Up-regulates expression of fibrinogen subunits FGA, FGB and FGG in host lung epithelial cells. Induces apoptosis in cell culture. Downregulates the type 1 interferon receptor by inducing serine phosphorylation within the IFN alpha-receptor subunit 1 (IFNAR1) degradation motif and increasing IFNAR1 ubiquitination.

300(5624):1399-1404 (2003).

Cellular Location

Virion. Host Golgi apparatus membrane; Multi-pass membrane protein. Host cell membrane; Multi-pass membrane protein Secreted. Host cytoplasm. Note=The cell surface expressed protein can undergo endocytosis. The protein is secreted in association with membranous structures

SARS virus PUP1 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)