

## Polyclonal Antibody to SARS virus PUP4 (N-term) - Purified

<b>Alternate names:</b>	SARS-CoV PUP4, Severe acute respiratory syndrome coronavirus Putative Uncharacterized Protein 4
<b>Catalog No.:</b>	AP13041PU-N
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	0.25 mg/ml
<b>Background:</b>	<p>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.</p>
<b>Host / Isotype:</b>	Rabbit / Ig
<b>Immunogen:</b>	This antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide selected from the N-terminal region of SARS virus PUP4.
<b>Format:</b>	<b>State:</b> Liquid purified Ig <b>Purification:</b> Protein G column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS <b>Buffer System:</b> PBS with 0.09% (W/V) sodium azide
<b>Applications:</b>	ELISA: 1/1,000. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	This antibody reacts to SARS virus PUP4.

**Storage:** Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.  
Avoid repeated freezing and thawing.  
Shelf life: one year from despatch.

**General Readings:**

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