


**SARS-ACM (residues 182-216)**

SARS-Associated Coronavirus Matrix  
recombinant, *E. coli*

Cat. No.	Amount
PR-1101	100 µg

**For general laboratory use.**

**Shipping:** shipped on gel packs

**Storage Conditions:** store at -20 °C

**Additional Storage Conditions:** avoid freeze/thaw cycles

**Shelf Life:** 12 months

**Molecular Weight:** 30 kDa

**Purity:** > 95 % (SDS-PAGE)

**Form:** liquid (Supplied in 50 mM Tris-HCl, 60 mM NaCl and 50% glycerol)

**Applications:**

Recombinant SARS-ACM Antigen may be used in ELISA and Western blots, excellent for detection of SARS with minimal specificity problems.

**Description:**

SARS-ACM contains the matrix protein immunodominant regions, amino acids: 182-216. SARS-ACM is purified by proprietary chromatographic techniques.

**Background:** SARS (Severe Acute Respiratory Syndrome) Coronavirus is an enveloped virus containing three outer structural proteins, namely the membrane (M), envelope (E), and spike (S) proteins. Spike (S)-glycoprotein of the virus interacts with a cellular receptor and mediates membrane fusion to allow viral entry into susceptible target cells. Accordingly, S-protein plays an important role in virus infection cycle and is the primary target of neutralizing antibodies.

**Specificity:** Immunoreactive with sera of SARSinfected individuals.

**Selected References:**

Liu *et al.* (2004) High-yield expression of recombinant SARS coronavirus nucleocapsid protein in methylotrophic yeast *Pichia pastoris*. *World J. Gastroenterol.* **10**:3602.

Luo *et al.* (2004) Nucleocapsid protein of SARS coronavirus tightly binds to human cyclophilin A. *Biochem. Biophys. Res. Commun.* **321**:557.

Wang *et al.* (2004) Low stability of nucleocapsid protein in SARS virus. *Biochemistry* **43**:11103.

Lau *et al.* (2004) Detection of severe acute respiratory syndrome (SARS) coronavirus nucleocapsid protein in sars patients by enzyme-linked immunosorbent assay. *J. Clin. Microbiol.* **42**:2884.

Woo *et al.* (2004) Longitudinal profile of immunoglobulin G (IgG), IgM, and IgA antibodies against the severe acute respiratory syndrome (SARS) coronavirus nucleocapsid protein in patients with pneumonia due to the SARS coronavirus. *Clin. Diagn. Lab. Immunol.* **11**:665.

Leung *et al.* (2004) Antibody response of patients with severe acute respiratory syndrome (SARS) targets the viral nucleocapsid. *J. Infect. Dis.* **190**:379.