

SARS-ACM (residues 182-216) SARS-Associated Coronavirus Matrix recombinant, *E. coli*

Cat. No.	Amount
PR-1101	100 µg

For *in vitro* use only
Quality guaranteed for 12 months
Store at -20°C

Avoid freeze / thaw cycles

Form

Liquid. Supplied in 50 mM Tris-HCl, 60 mM NaCl and 50% glycerol.

Application

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

Specificity

Immunoreactive with sera of SARSinfected individuals.

Molecular Weight

30 kDa

Purity

>95% by SDS-PAGE

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.

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.