DATA SHEET





SARS-ACN/3 (residues 1-49/192-220)

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

Cat. No.	Amount
PR-1104	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: 32 kDa

Purity: > 95 % (SDS-PAGE)

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

glycerol)

Applications:

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

Description:

SARS-ACN contains Nucleocapsid protein immunodominant regions, amino acids: 1-49, 192-220. SARS-ACN 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.