

SARS-CoV

#### Introduction:

SARS 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.

## **Description:**

The Recombinant SARS-CoV Nucleocapsid Protein is manufactured with N-terminal fusion HisTag. The Recombinant SARS-CoV **Nucleocapsid His-Tagged Fusion** Proteinis 47.8 kDa containing 422 amino acid residues of the SARS-CoV Nucleocapsid protein and 15 additional amino acid residues HisTag (underlined). MRGSHHHHHH GMASHMSDNG PQSNQRSAPR ITFGGPTDST DNNQNGGRNG ARPKQRRPQG LPNNTASWFT ALTQHGKEEL RFPRGQGVPI NTNSGPDDQI GYYRRATRRV RGGDGKMKEL SPRWYFYYLG TGPEASLPYG ANKEGIVWVA TEGALNTPKD HIGTRNPNNN AATVLQLPQG TTLPKGFYAE GSRGGSQASS RSSSRSRGNS RNSTPGSSRG NSPARMASGG GETALALLLL DRLNQLESKV SGKGQQQQQQ

TVTKKSAAEA SKKPRQKRTA

TKQYNVTQAF GRRGPEQTQG NFGDQDLIRQ GTDYKHWPQI AQFAPSASAF FGMSRIGMEV TPSGTWLTYH GAIKLDDKDP QFKDNVILLN KHIDAYKTFP PTEPKKDKKK KTDEAQPLPQ RQKKQPTVTL LPAADMDDFS RQLQNSMSGA SADSTQA.

# Specificity:

The amino acid sequence of the recombinant SARS-CoV Nucleocapsid protein is 100% homologous to amino acid sequence of the native SARS-CoV Nucleocapsid protein.

## **Purification Method:**

Three-step procedure using affinity Ni-NTA chromatography and size exclusion chromatography before and after refolding.

### Source:

Escherichia coli.

### Formulation:

Sterile filtered and lyophilized from 0.5 mg/ml in 0.05 M Acetate buffer pH4.

### Solubility:

Add 0.2 ml of 0.1M Acetate buffer pH4 and let the lyophilized pellet dissolve completely. For conversion into higher pH value, we recommend intensive dilution by relevant buffer to a concentration of 10  $\mu$  g/ml. In higher concentrations the solubility of this antigen is limited.

### **Purity:**

Greater than 95% as determined by SDS-PAGE.

### Storage:

Store lyophilized protein at -20 ° C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4 ° C for a limited period of time; it does not show any change after two weeks at 4 ° C. The lyophilized protein remains stable

until the expiry date when stored at - 20 ° C.

Applications: Western blotting.

Usage:

ProSpec's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

Prospec - Contact details

Email

info@prospecbio.com

Address

Website http://www.prospecbio.com