

Recombinant SARS Associated CoronaVirus, Nucleocapsid (a.a. 340-390), GST-tagged

Cat.No:DAG522 Lot. No. (See product label)

PRODUCT INFOMATION

Storage	Store at –20oC.
Antigen Description	SARS is caused by a human coronavirus, which are the major cause of upper respiratory tract illness in humans, such as the common cold. Coronaviruses are positive stranded RNA viruses, featuring the largest viral RNA genomes known to date (27-31 kb). The spike protein is the main surface antigen of the coronavirus. The most prominent protein in the culture supernatants infected with SARS virus is a 46 kDa nucleocapsid protein. This suggests that the nucleocapsid protein is a major immunogen that may be useful for early diagnostics. The nucleocapsid protein of SARS shares little homology with nucleocapsid proteins of other members of the coronavirus family. Nucleocapsid proteins of other resonavirus have been reported to be involved in forming the viral core and also in the packaging and transcription of the viral RNA.
Source	E. coli.
Buffer	50mM Tris-HCl, pH 8.0, 60mM Sodium Chloride containing 50% glycerol
Concentration	1mg/ml (Bradford method)
Applications	Suitable for use in ELISA and Western blot. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded.
Molecular weight	31.7kDa (340-390aa)
Form	Purified, Liquid
Preservative	None
Purity	>95% pure (10% PAGE, coomassie staining). GS-4B Sepharose-Affinity Purification.
Key words	SARS-CoV, Nucl.; SARS Associated Coronavirus, Nucleocapsid; SARS; Coronaviruses; N; N structural protein; NC; Nucleocapsid protein; Nucleoprotein; SARS coronavirus N protein; SARS CoV; SARSCoV; Severe acute respiratory syndrome; Coronaviridae; Coronavirinae

Background

Introduction Coronaviruses are species in the genera of virus belonging to the subfamily Coronavirinae in the family Coronaviridae. Coronaviruses are enveloped viruses with a positive-sense single-stranded RNA genome and a helical symmetry. The genomic size of coronaviruses ranges from approximately 16 to 31 kilobases, extraordinarily large for an RNA virus. This morphology is actually formed by the viral spike (S) peplomers, which are proteins that populate the surface of the virus and determine host tropism. Coronaviruses are grouped in the order Nidovirales, named for the Latin nidus, meaning nest, as all viruses in this order produce a 3" co-terminal nested set of subgenomic mRNA"s during infection.