Recombinant SARS Coronavirus Nucleoprotein, His-tagged

Cat. No. N-131V **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant SARS Coronavirus Nucleoprotein (1-422aa) was fused to His-tag at N-terminus and expressed in E.coli.
Species	SARS-CoV
Source	E.coli
ProteinLength	422
Description	Coronaviruses (CoVs) are a diverse family of viruses which cause a variety of diseases in mammals and birds ranging from enteritis in cows and pigs and upper respiratory disease in chickens to potentially lethal human respiratory infections. Coronaviruses can cause a range of symptoms varying from mild symptoms such as the common cold to more serious respiratory illnesses. They primarily cause respiratory and enteric diseases in mammals and birds. Coronavirus symptoms include rhinorrhea, sneezing, cough, nasal obstruction, bronchitis and so on. They encode five structural proteins in their genomes; namely, the Spike (S), Membrane (M), Envelope (E) glycoproteins, Hemagglutinin Esterase (HE) and Nucleoprotein (N). All envelope proteins and N protein is present in all virions but HE is only present in some beta coronaviruses. There are three main groups of coronaviruses: alpha, beta, and gamma. Nucleoproteins, also known as nucleocapsid proteins, are phosphoproteins that are capable of binding to helix and have flexible structure of viral genomic RNA. It plays an important role in virion structure, replication and transcription of coronaviruses, as

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	it localizes in both the replication/transcriptional region of the coronaviruses and the ERGIC region where the virus is collected. It packages the positive strand viral genome RNA into a helical ribonucleocapsid (RNP) and plays a fundamental role during virion assembly through its interactions with the viral genome and membrane protein M. It also plays an important role in enhancing the efficiency of subgenomic viral RNA transcription as well as viral replication.
Form	Lyophilised. Sterile filtered and lyophilized from 0.5 mg/ml in 0.05M Acetate buffer pH4.0.
Molecular Mass	Fusion protein is 47.8 kDa containing 422 amino acid residues of the SARS-CoV Nucleocapsid protein and 15 additional amino acid residues.
AA Sequence	MRGSHHHHHHGMASHMSDNGPQSNQRSAPRITFGGPTDSTDNNQNGGRNGARP KQRRPQGLPNNTASWFTALTQHGKEELRFPRGQGVPINTNSGPDDQIGYYRRATR RVRGGDGKMKELSPRWYFYYLGTGPEASLPYGANKEGIVWVATEGALNTPKDHIGT RNPNNNAATVLQLPQGTTLPKGFYAEGSRGGSQASSRSSSRSRGNSRNSTPGSSR GNSPARMASGGGETALALLLLDRLNQLESKVSGKGQ
Purity	>95% as determined by SDS-PAGE.
Applications	Antigen in immunoassays, Western blot.
Storage	Store lyophilized protein at -20 centigrade. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4 centigrade for a limited period of time.Proteindoes not show any change after two wee
Reconstitution	Add 0.2 ml of 0.1M Acetate buffer pH4.0 and let the lyophilized pellet dissolve completely. For conversion into higher pH value, we recommend intensive dilution by

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	relevant buffer to a concentration of 10μg/ml. In higher concentrations the solubility of t
Shipping	Dry Ice.
Warning	For Research Use Only.

GENE INFORMATION

Synonyms	GU280_gp10

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