SARS-CoV-2 Nucleocapsid protein, N-His Tag

HAg2002

Product name:	SARS-CoV-2 Nucleocapsid protein, N-His Tag
Species reactivity:	SARS-CoV-2
Bio-Activity:	Testing in progress.
Protein construction description:	A DNA sequence encoding the SARS-CoV-2 Nucleocapsid protein protein (P0DTC9) (Met 1-Ala 419) was expressed with a His tag at the N-terminus.

Background: The nucleocapsid protein (N-protein) is a structural protein that binds to the coronavirus RNA genome, thus creating a shell (or capsid) around the enclosed nucleic acid. The N-protein also interacts with the viral membrane protein during viral assembly, assists in RNA synthesis and folding, plays a role in virus budding, and affects host cell responses, including cell cycle and translation. Coronavirus N protein is required for coronavirus RNA synthesis and has RNA chaperone activity that may be involved in template switch. Nucleocapsid protein is the most abundant protein of coronavirus. During virion assembly, N protein binds to viral RNA and leads to the formation of the helical nucleocapsid. Nucleocapsid protein is a highly immunogenic phosphoprotein also implicated in viral genome replication and in modulating cell signaling pathways. Because of the conservation of the N protein sequence and its strong immunogenicity, the N protein of coronavirus is chosen as a diagnostic tool.

Purity: >95% as determined by SDS-PAGE.

Endotoxin: Less than 1.0 EU per μg by the LAL method.

Fragment region: Nucleocapsid protein (1-419)

Source: E.coli

Accession: P0DTC9

Predicted molecular mass: 49.4 kD

Formulation: Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, 5% Trehalose, 5% mannitol.

Reconstitution: Reconstitute at 250 μg/ml in sterile water.

Storage: Please avoid repeated freeze-thaw cycles. Samples are stable for up to twelve months from date of receipt at -20℃ to -80℃ It is recommended that aliquot the reconstituted solution to minimize freeze-thaw cycles.

Images

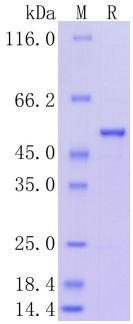

Fig1: Protein on SDS-PAGE under reducing (R) condition.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".