

Recombinant SARS-CoV-2 Nucleocapsid Protein (N-His Tag)(Omicron)

Catalog No. PKS030470

Description

Synonyms	2019-nCoV coronavirus NP Protein; SARS-Cov-2 np Protein; Omicron Nucleoprotein Protein
Species	SARS-CoV-2
Expression_host	E.coli
Sequence	Met1-Ala419(P13L, E31del, R32del, S33del, R203K, G204R)
Accession	YP_009724397.2
Mol_Mass	46.31 kDa
Tag	N-His
Bio_activity	Testing in progress

Properties

Purity	> 95 % as determined by SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 50mM PB, 500mM NaCl, pH 7.4.
Reconstitution	Please refer to the printed manual for detailed information.

Background

Coronaviruses are enveloped viruses with a positive-sense RNA genome and with a nucleocapsid of helical symmetry. Coronavirus nucleoproteins localize to the cytoplasm and the nucleolus, a subnuclear structure, in both virus-infected primary cells and in cells transfected with plasmids that express N protein. The 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.