

HRP Conjugated Recombinant SARS-CoV-2 (2019-nCoV) Nucleocapsid Protein (His tag)

Cat. No. bs-41408P-HRP

Description

Protein Sequence	HRP conjugated recombinant SARS-CoV-2 (2019-nCoV) N protein full length with N-His Tag(1-419aa).
Source	E.coli Expression System
Accession	P0DTC9
Mol wt	The protein has a predicted MW of 46kDa (SDS-PAGE).
Endotoxin	Not tested.
Purity	>95% as determined by SDS-PAGE >95% as determined by HPLC
Activity assay	Not tested.

Formulation and Storage

Formulation	Lyophilized from 0.22um filtered solution in 20mM PB (pH 7.4). Normally 5 % trehalose is added as protectant before lyophilization.
Storage	The product should be stored at -80°C or -20°C and are guaranteed for 12 months from date of receipt. Avoid repeated freeze/thaw cycles.

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. Coronavirus N protein is required for coronavirus RNA synthesis, and has RNA chaperone activity that may be involved in template switch. Nucleocapsid protein is a most abundant protein of coronavirus. During virion assembly, N protein binds to viral RNA and leads to 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 N protein sequence and its strong immunogenicity, the N protein of coronavirus is chosen as a diagnostic tool.