

Recombinant SARS-CoV-2 Guanine-N7_meth Protein (His Tag)

Catalog Number: PKSR030473

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Species	SARS-CoV-2
Source	E.coli-derived SARS-CoV-2 Guanine-N7_meth protein Ala1-Gln527, with an N-terminal His
Calculated MW	62.9 kDa
Observed MW	60 kDa
Accession	YP_009725309.1
Bio-activity	Not validated for activity

Properties

Purity	> 85 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < - 20°C.
Formulation	Supplied as a 0.2 µm filtered solution of 20mM PB, 100mM NaCl, 2mM DTT, 20% Glycerol, 0.1% TritonX-100, pH 6.0.

Background

The nonstructural protein (nsp) 14 of SARS-CoV 2 was identified as a cap (guanine-N7)-methyltransferase (N7-MTase). Nsp14 of coronaviruses two different activities: an exoribonuclease activity acting on both ssRNA and dsRNA in a 3' to 5' direction and a N7-guanine methyltransferase activity. It may be involved in the proof-reading ability during the viral RNA replication and transcription. GTP, dGTP as well as cap analogs GpppG, GpppA and m7GpppG could be methylated by nsp14. positive-stranded RNA genome of the coronaviruses is translated from ORF1 to yield polyproteins that are proteolytically processed into intermediate and mature nonstructural proteins (nsps). SARS-CoV 2 polyproteins incorporate 16 protein domains (nsps). The putative non-structural protein 2 (nsp2) of SARS-CoV plays an important role in viral transcription and replication, and is an attractive target for anti-SARS drug development.

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