

Recombinant 2019-nCoV Guanine-N7_meth Protein (His Tag)

Catalog No: RPES0009

Category: Recombinant Protein

Sequence Information

Species: Virus

Sequence: Ala1-Gln527

Accession: YP_009725309.1

Tag: N-6His

Product Information

Synonyms: SARS-CoV 2 nsp14; SARS-CoV 2 ExoN; Guanine-N7 methyltransferase

Source: E.coli

Purity: > 85 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Formulation: Supplied as a 0.2 µM filtered solution of PBS, 10% Glycerol, pH 7.4.

Reconstitution: Please refer to the printed manual for detailed information.

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.

Background

The nonstructural protein (nsp) 14 of 2019-nCoV was identified as a cap (guanine-N7)-methyltransferase (N7-MTase). Nsp14 of coronaviruses has two different activities: an exonuclease 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. The 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). 2019-nCoV 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.