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Recombinant SARS-CoV-2 (2019-nCoV) NSP16 / 2'-O-Methyltransferase (His Tag)

Catalog No. CSI99000 Quantity: $100 \mu g$

Alternate Names: Replicase polyprotein 1ab, ORF1ab polyprotein, 2'-O-Methyltransferase, Non-structural

protein 16, nsp16

Description: 2'-O-Methyltransferase/nsp16 is one of 15 chains cleaved from Replicase polyprotein

1ab. 2'-O-Methyltransferase mediates mRNA cap 2'-O-ribose methylation to the 5'-cap structure of viral mRNAs. N7-methyl guanosine cap is a prerequisite for binding of nsp16. Therefore plays an essential role in viral mRNAs cap methylation which is essential to evade immune system.Nonstructural protein 16 (NSP16) / viral 2'O-methyltransferase (2'O-MTase) is highly conserved. The conserved 2'O-MTase activity is important for CoV

pathogenesis and NSP16 is a conserved universal target for rapid live attenuated vaccine design in an expanding Coronavirus outbreak setting, such as COVID-19. Targeting on the 2'O-methylation pathway on SARS-CoV replication and pathogenesis can be the treatment options for vaccine and anti-viral drugs development which can

against SARS-CoV-2, SARS-CoV, MERS-CoV or other RNA and DNA viruses.

UniProt ID: P0DTD1

Accession Number: YP 009724389.1

Protein Construction: A DNA sequence encoding the SARS-CoV-2 (2019-nCoV) 2'-O-Methyltransferase

(Ser6799-Asn7096) was expressed with a polyhistidine tag at the C-terminus.

Source: E. coli

Formulation: Sterile 10mM Tris 250mM NaCl, 50% Glycerol pH 7.4.

Molecular Weight: The recombinant SARS-CoV-2 (2019-nCoV) 2'-O-Methyltransferase consists of 299

amino acids with a predicted molecular mass of 33.46 kDa.

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

Biological Activity: Testing in progress

Predicted N-terminal: Met

Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C. It is recommended to

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store working aliquots at -20°C to -80°C.

Avoid repeated freeze-thaw cycles.

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