

Recombinant SARS-CoV-2 NSP7 (C-His)

Catalog No: BP214

Description	Recombinant SARS-CoV-2 NSP7 is produced by our E.coli expression system and the target gene encoding Ser1-Gln83 is expressed with a 8His tag at the C-terminus.
Expression System	E.coli
Alternative name	Non-Structural Protein 7; nsp7
Accession No.	YP_009725303.1
Predicted Molecular Weight	11.5kDa
Apparent Molecular Weight	<14.4kDa, reducing conditions.
Quality Control	Purity: greater than 95% as determined by reducing SDS-PAGE. Activity: validated through enzymatic assay of NSP7-NSP8/NSP12
Formulation	Supplied as a 0.2 um filtered solution of 20mM Tris, 150mM NaCl, 10%Glycerol, 4mM MgCl ₂ , pH8.0
Shipping	The product is shipped on dry ice pack. Upon receipt, store it immediately at the temperature listed below.
Storage	Store at < -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.
Background	The replication of coronavirus is operated by a set of non-structural proteins (nsps) encoded by open reading frame 1a (ORF1a) and ORF1ab in its genome. NSP7 is a component of the coronavirus replicase polyprotein that forms a replication complex. NSP7 is conserved among all coronavirus. It can form a dimer with NSP8 and subsequently assembles into a large hexadecameric structure, which participates in viral replication by acting as a primase. The NSP12-NSP7-NSP8 subcomplex is found to be the minimal core component for the synthesis of coronavirus RNA. NSP7 is of interest for its potential roles in the transcription and replication of the positive-stranded viral RNA genome.

SDS-PAGE

