

## Recombinant 2019-nCoV Helicase

(N-6His-MBP)

Catalog # EPT080

**Expression Host** E.coli

**DESCRIPTION** Recombinant 2019-nCoV Helicase is produced by our

E.coli expression system and the target gene encoding

Ala5325-Gln5925 is expressed with a 6His, MBP tag at

the N-terminus.

Accession P0DTD1

**Synonyms** SARS-CoV 2 Helicase; SARS-CoV 2 nsp13

Mol Mass 112.8 KDa

**AP Mol Mass** 120 KDa, reducing conditions

**Purity** Greater than 80% as determined by reducing

SDS-PAGE.

**Endotoxin** 

**FORMULATION** Supplied as a 0.2 µm filtered solution of PBS, pH 7.4.

RECONSTITUTION

**SHIPPING** The product is shipped on dry ice/polar packs.

Upon receipt, store it immediately at the temperature



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listed below.

STORAGE

Store at  $\leq$ -70°C, stable for 6 months after receipt.

Store at  $\leq -70$  °C, stable for 3 months under sterile conditions after opening.

Please minimize freeze-thaw cycles.

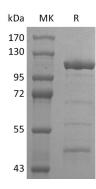
BACKGROUND

The non—structural protein 13 (nsp13) of SARS—CoV 2 is a helicase that separates double—stranded RNA or DNA with a 5'-3' polarity, using the energy of nucleotide hydrolysis. basic biochemical characterization of nsp13 demonstrated that it can unwind both doublestranded DNA and RNA in a 5' -3' direction, and it can hydrolyze all deoxyribonucleotide and ribonucleotide triphosphates. Helicases are motor proteins that utilize the energy derived from nucleotide hydrolysisto unwind double-stranded nucleic acids into two single-stranded nucleic acids. Initially, helicases were only thought to be molecular engines that unwind nucleic acids during replication, recombination, and DNA repair. Recent studies have shown that they are also involved in other biological processes, including displacement of proteins from movement of Holliday junctions, nucleic acid,





chromatin remodeling, catalysis of nucleic acid conformational changes, several aspects of RNA metabolism, including transcription, mRNA splicing, mRNA export, translation, RNA stability and mitochondrial gene expression. Some human diseases, including Bloom's syndrome, Werner's syndrome, and Xeroderma Pigmentosum have been associated with defects in helicase function.



**SDS-PAGE** 

