SARS-CoV-2 RNA polymerase Antibody / NSP12 (RQ6306)

Catalog No.	Formulation	Size
RQ6306	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P0DTD1
Applications	ELISA
Limitations	This SARS-CoV-2 RNA polymerase antibody is available for research use only.



Description

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is an enveloped, positive-sense, single-stranded RNA virus that causes coronavirus disease 2019 (COVID-19). Virus particles include the RNA genetic material and structural proteins needed for invasion of host cells. Once inside the cell the infecting RNA is used to encode structural proteins that make up virus particles, nonstructural proteins that direct virus assembly, transcription, replication and host control and accessory proteins whose function has not been determined.~ ORF1ab, the largest gene, contains overlapping open reading frames that encode polyproteins PP1ab and PP1a. The polyproteins are cleaved to yield 16 nonstructural proteins, NSP1-16. Production of the longer (PP1ab) or shorter protein (PP1a) depends on a -1 ribosomal frameshifting

event. The proteins, based on similarity to other coronaviruses, include the papain-like proteinase protein (NSP3), 3C-like proteinase (NSP5), RNA-dependent RNA polymerase (NSP12, RdRp), helicase (NSP13, HEL), endoRNAse (NSP15), 2'-O-Ribose-Methyltransferase (NSP16) and other nonstructural proteins. SARS-CoV-2 nonstructural proteins are responsible for viral transcription, replication, proteolytic processing, suppression of host immune responses and suppression of host gene expression. The RNA-dependent RNA polymerase is a target of antiviral therapies.

Application Notes

Optimal dilution of the SARS-CoV-2 RNA polymerase antibody should be determined by the researcher.

Immunogen

Amino acids SADAQSFLNRVCGVSAARLTPCGTGTSTDVVYRAFDIYNDKVAGFAKFLKTNCCRFQEKDEDDNLIDSYFVV
KRHTFSNYQHEETIYNLLKDCPAVAKHDFFKFRIDGDMVP
HISRQRLTKYTMADLVYALRHFDEGNCDTLKEILVTYNCCDDDYFNKggggDPSRILGAGCFVDDIVKTDGTLMIERFVSLAI
DAYPLTKHPNQEYADVFHLYLQYIRKLHDELT
GHMLDMYSVMLTNDNTSRYWEPEFYEAMYTPHTVLQ were used as the immunogen for the SARS-CoV-2 RNA polymerase antibody.

Storage

After reconstitution, the SARS-CoV-2 RNA polymerase antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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