

Anti-SARS-CoV-2 NSP12 Antibody

CATALOG NO.: A2264-100 (100 µg)

BACKGROUND DESCRIPTION: Severe acute respiratory syndrome coronavirus-2 (SARS CoV-2) is an infectious disease caused by a novel beta-coronavirus called SARS-CoV-2. The SARS-CoV-2 is a large enveloped, positive-sense RNA with a genome about ~ 30 kb long. The genome encodes 14 open reading frames, of which ORF1a and ORF1b are translated to 2 polyproteins. The 2 polyproteins undergo autoproteolysis to yield 16 non-structural proteins (NSP1-16). NSP12 plays a key role in replication/translation machinery. It is highly homologous to the SARS-CoV NSP12 (sequence identity: 96.4% and sequence similarity: 99.4%), indicating that the function and mechanism of action may be conserved. NSP12 is an RNA-dependent RNA polymerase that copies viral RNA. It has an extended N-terminal region that binds to 2 cofactors (NSP7 and NSP8) necessary for the polymerase function. Based on previous studies, the N-terminal of NSP12 has been demonstrated to possess nucleotidyltransferase activity. The RdRp domain is located in the C-terminal, which enables polymerase function. Studies also showed that NSP13 has 2 polymerase activities: primer-dependent and primer-independent RNA synthesis. Due to its pivotal role in viral replication, NSP12/RdRp is considered a primary target for anti-viral drug development.

ALTERNATE NAMES: RNA-directed RNA polymerase, Pol, RdRp, Non-structural protein 12, Replicase polyprotein 1ab, NSP12

ANTIBODY TYPE: Polyclonal

HOST/ISOTYPE: Rabbit / IgG

IMMUNOGEN: Recombinant SARS-CoV-2 NSP12

MOLECULAR WEIGHT: 100 kDa

SPECIFICITY: Recognizes SARS-CoV-2 NSP12 protein

FORM: Liquid

FORMULATION: In PBS, pH 7.4, 50% glycerol, 0.05% proclin 300

SPECIES REACTIVITY: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)

STORAGE CONDITIONS: Store at -20 to -80°C. Avoid repeated freeze/thaw cycles

APPLICATIONS AND USAGE: WB 1:1000

This information is only intended as a guide. The optimal dilutions must be determined by the user



Western blot was performed to analyze Anti-SARS-CoV-2 NSP12 Antibody using pseudovirion lysates. 20 µg of lysate was loaded in the well. Primary antibody dilution used was 1:1000

RELATED PRODUCTS:

Anti-CCR5 (Leronlimab), Humanized Antibody (A2181)
 recMAb™ Anti-CD209 Antibody (A2193)
 Anti-SARS-CoV-2 NP Antibody (Clone# 6F10) (A2060)
 Anti-CD6 (Itolizumab), Humanized Antibody (A2164)

FOR RESEARCH USE ONLY! Not to be used on humans.