Anti-Covid-19 & SARS-CoV Nucleoprotein [CR3009 (03-009)] Standard Size Ab01691-44.0

This chimeric cat antibody was made using the variable domain sequences of the original human IgG1 format, for improved compatibility with existing reagents, assays and techniques.

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Isotype and Format: Cat IgM, Kappa
Clone Number: CR3009 (03-009)
Alternative Name(s) of Target: NP; NC; Protein N; Nucleocapsid protein; SARS-CoV Protein N; SARS-CoV Nucleocapsid protein; SARS Coronavirus; SARS-CoV-2; SARS CoV 2; 2019-nCoV
UniProt Accession Number of Target Protein: P0DTC9, P59595
Published Application(s): ELISA, IF
Published Species Reactivity: SARS-CoV, SARS-CoV2
Immunogen: The original antibody was generated by cloning the variable regions of the scFvs selected from phage display libraries into separate vectors for IgG1 heavy-chain and light-chain expression. The harvested supernatents were then purified on protein A columns. The original antigen was the whole irradiated virion.
Specificity: This antibody recognizes and binds the non-linear/conformational epitope of the N protein of SARS CoV and also binds the SARS CoV2 nucleoprotein.
Application Notes: This antibody is recommended for detection of SARS CoV2 protein N (nucleoprotein). This antibody binds both the nucleocapsid protein of the SARS-CoV and SARS CoV-2 (2019-nCoV). Initial characterization of the antibody for binding to 2019-nCoV was done using ELISA. This antibody shows potential to be used for development of diagnostic assays. Various isotype versions of the antibody namely human IgG1, IgG3, IgM, IgA and the less common IgG2 and IgG4 are available for the investigation of their role in response to SARS CoV2. Competitive ELISA of this antibody with CR3018 suggests that both these antibodies bind different epitopes of the N protein of SARS CoV. Thus, a combination of these two antibodies is suggested for virus capture assays. Immunofluorescence staining was used to demonstrate binding of CR3009 to SARS-CoV infected Vero cells. (PMID:15650189)
Antibody First Published in: Van Den Brink et al. Molecular and Biological Characterization of Human Monoclonal Antibodies Binding to the Spike and Nucleocapsid Proteins of Severe Acute Respiratory Syndrome Coronavirus. Journal of Virology (2005); Vol-79 (3); p. 1635–1644. PMID:15650189
Note on publication: Describes the generation and characterization of the antibody.

Product Form

Size: 50 µg Purified antibody.
Purification: Affinity Purified using a recombinant lectin column
Supplied In: PBS with 0.02% Proclin 300.
Storage Recommendation: Store at 4^{o}C for up to 3 months. For longer storage, aliquot and store at -20^{o}C.
Concentration: 1 mg/ml.

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Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.

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