

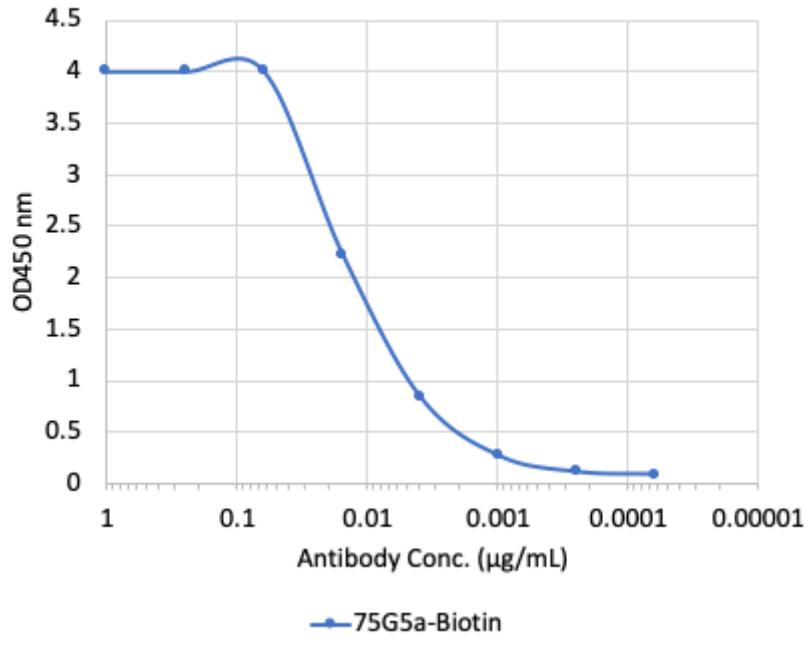
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Applications	Detection	Clonality	Isotype
ELISA	Streptavidin	Monoclonal	Rabbit IgGK

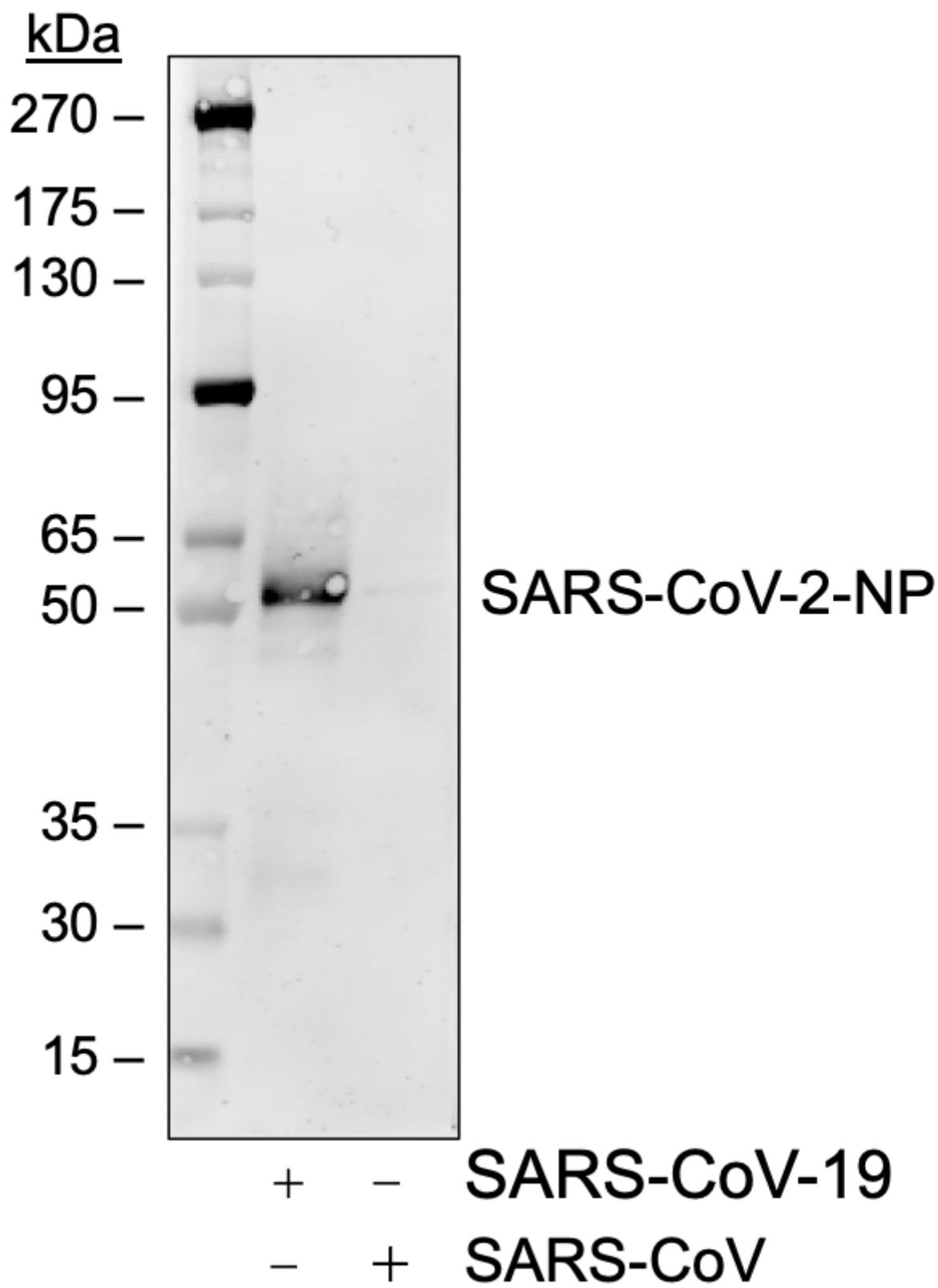
<b>Format:</b>	Biotin
<b>Cross Reactivity:</b>	Highly-specific to SARS-CoV-2 nucleoprotein; does not cross-react with nucleoprotein from SARS-CoV or other coronaviruses.
<b>Formulation:</b>	1X PBS, 0.02% NaN3
<b>Preparation:</b>	Protein A
<b>Reactivity:</b>	Other
<b>Recommended Usage:</b>	Used for specific, high-sensitivity detection of SARS-CoV-2 nucleocapsid protein (NP) in immunoassay. Can be paired with other NP-specific clones for detection in sandwich ELISA format.
<b>Immunogen:</b>	SARS-CoV-2 nucleoprotein (NP) specific peptide
<b>Description:</b>	We have leveraged our next-generation rabbit mAb discovery platform to develop recombinant rabbit monoclonal antibodies with extremely high sensitivity and specificity to SARS-CoV-2. These antibodies, which include clones 75G5a ( <a href="#">Abwiz Cat. #2481</a> ), 84C4a ( <a href="#">Abwiz Cat. #2486</a> ), 84D7 ( <a href="#">Abwiz Cat. #2491</a> ), and 85C1 ( <a href="#">Abwiz Cat. #2496</a> ) can be paired in sandwich detection assay and used to detect nucleoprotein (NP) antigen from SARS-CoV-2. Antibodies 75G5a, 84C4a, and 84D7 do not cross-react to the highly related SARS-CoV virus or to any other coronaviruses tested. Sandwich ELISA detection using TMB/acid developer reliably detects NP antigen in the pg/mL range, and sensitivity is expected to be even higher when using more sensitive developer strategies. This panel of antibodies can be used as raw materials for diagnostic kits and can be applied to lateral flow systems for diagnostic detection of COVID-19.

**References:**

### Binding of biotinylated IgG to COVID-19 Nucleocapsid Protein (1 $\mu$ g/mL)

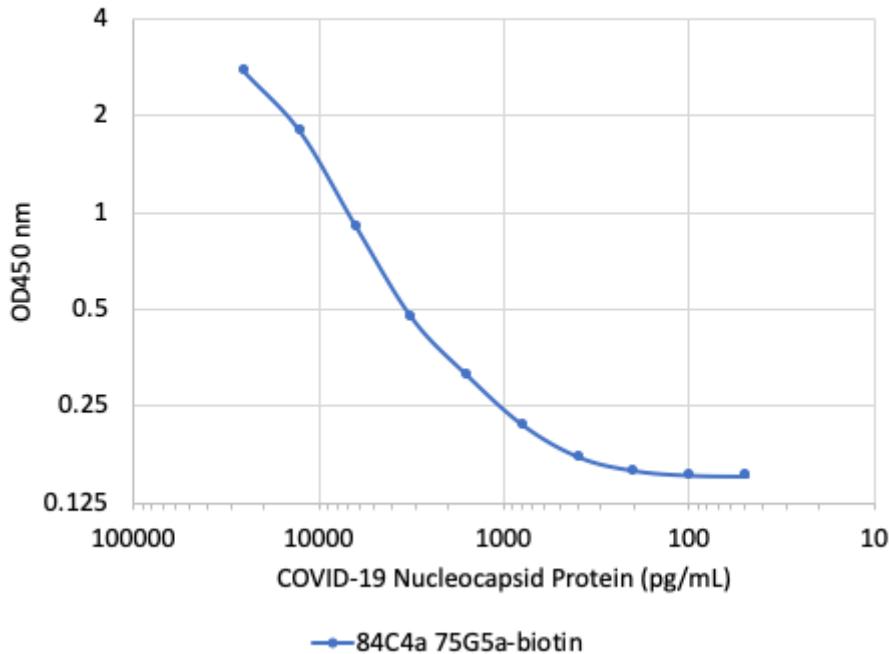


Microtiter wells were coated with SARS-CoV-2 (COVID-19) Nucleocapsid Protein (NP) at 1  $\mu$ g/mL. Biotin-conjugated rabbit monoclonal antibody 75G5a (Cat# 2482) was serially diluted 1:2 starting at 1  $\mu$ g/mL, and shows high-sensitivity binding to COVID-19 NP antigen.



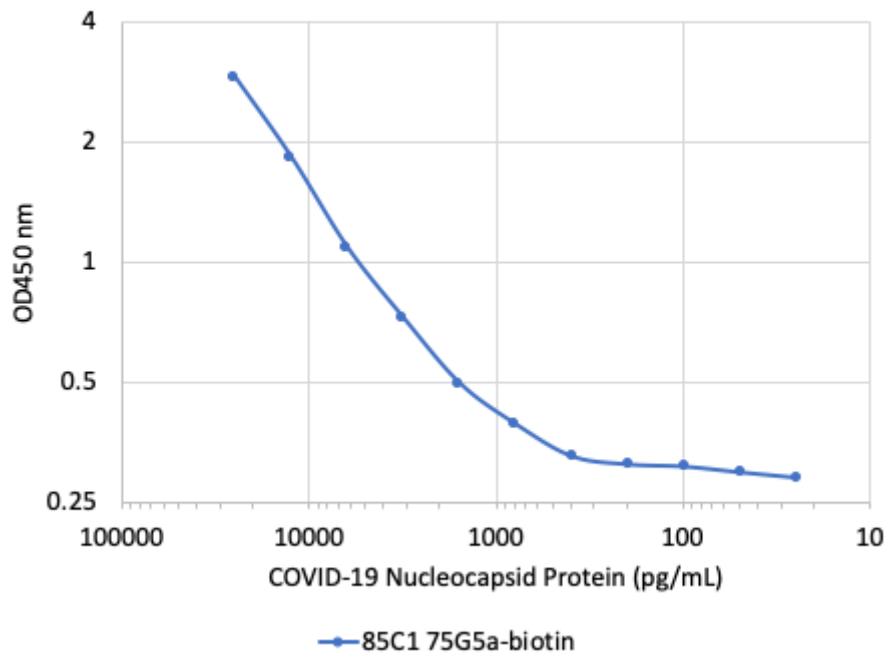
Western blot analysis of SARS-CoV-2 and SARS-CoV nucleocapsid protein (50 ng) probed with 1 ug/mL CoV2NP nucleocapsid rabbit monoclonal antibody (75G5), CoV2NP-75G5a, Cat# 2481.

**Capture antibody: 84C4a  
Detection antibody: 75G5a-biotin**



A sandwich ELISA was performed using SARS-CoV-2 (COVID-19) Nucleocapsid Protein (NP) specific rabbit monoclonal antibodies: 84C4a (Cat# 2486) as a capture antibody and 75G5a-biotin (Cat# 2482) as a detection antibody. COVID-19 NP was serially diluted 1:2 starting at 25 ng/mL. Rabbit monoclonal antibodies 84C4a and 75G5a-biotin detected COVID-19 NP antigen at very high sensitivity as low as 49 pg/mL (4.9 pg).

**Capture antibody: 85C1  
Detection antibody: 75G5a-biotin**



A sandwich ELISA was performed using SARS-CoV-2 (COVID-19) Nucleocapsid Protein (NP) specific rabbit monoclonal antibodies: 85C1 (Cat# 2496) as a capture antibody and 75G5a-biotin (Cat# 2482) as a detection antibody. COVID-19 NP was serially diluted 1:2 starting at 25 ng/mL. Rabbit monoclonal antibodies 85C1 and 75G5a-biotin detected COVID-19 NP antigen at very high sensitivity as low as 25 pg/mL (2.5 pg).