

## 12-4001-B: Anti SARS-CoV-2 Nucleocapsid Rabbit mAb (Clone:75G5a) Biotin Conjugate

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	75G5a
<b>Application :</b>	ELISA
<b>Conjugate :</b>	Biotin
<b>Gene :</b>	N
<b>Gene ID :</b>	43740575
<b>Uniprot ID :</b>	P0DTC9
<b>Format :</b>	Purified
<b>Isotype :</b>	Rabbit IgG1 k
<b>Immunogen Information :</b>	SARS-CoV-2 nucleoprotein (NP) specific peptide.

### Description

SARS-CoV-2 Nucleocapsid antibodies, which include clones 75G5a, 84C4a, 84D7 and 85C1 can be paired in sandwich detection assay and used to detect nucleoprotein (NP) antigen from SARS-CoV-2. These antibodies 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.

### Product Info

<b>Amount :</b>	200 $\mu$ L (0.5 mg/mL)
<b>Purification :</b>	Protein A Chromatography
<b>Content :</b>	1X PBS, 0.02% NaN <sub>3</sub>
<b>Storage condition :</b>	Store at 2 - 8°C. Do Not Freeze.

### Application Note

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.

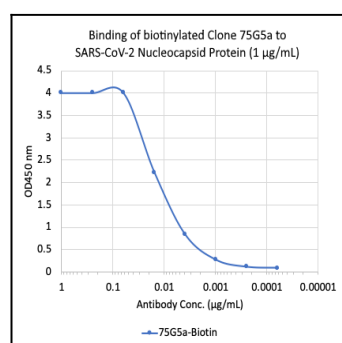


Figure 1: Microtiter wells were coated with SARS-CoV-2 (COVID-19) Nucleocapsid Protein (NP) at 1  $\mu$ g/mL. Biotin-conjugated rabbit monoclonal antibody 75G5a (Cat# 12-4001-B) was serially diluted 1:2 starting at 1  $\mu$ g/mL, and shows high-sensitivity binding to COVID-19 NP antigen.

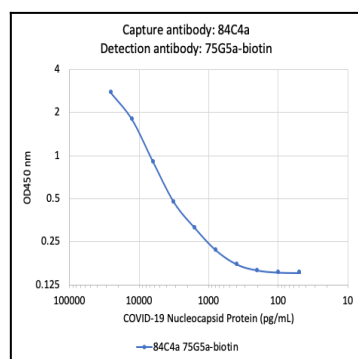


Figure 2: A sandwich ELISA was performed using SARS-CoV-2 (COVID-19) Nucleocapsid Protein (NP) specific rabbit monoclonal antibodies: Clone 84C4a (Cat# 12-4002) as a capture antibody and Clone 75G5a-biotin (Cat# 12-4001-B) as a detection antibody. COVID-19 NP was serially diluted 1:2 starting at 25 ng/mL. 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).

Figure 3: Western blot analysis of SARS-CoV-2 and SARS-CoV nucleocapsid protein (50 ng) probed with 1 ug/mL Anti SARS-CoV-2 Nucleocapsid Rabbit mAb (Clone:75G5a), Cat# 12-4001.