

## 12-4001: Anti SARS-CoV-2 Nucleocapsid rabbit mAb (Clone:75G5a)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	75G5a
<b>Application :</b>	ELISA
<b>Conjugate :</b>	Unconjugated
<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 and 84D7 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> , 50% Glycerol, 0.1% BSA.
<b>Storage condition :</b>	Store at -20°C. Avoid repeated freeze and thaw cycles.

### Application Note

Recommended dilutions: ELISA: 1  $\mu$ g/ml. However, this need to be optimized based on the research applications.

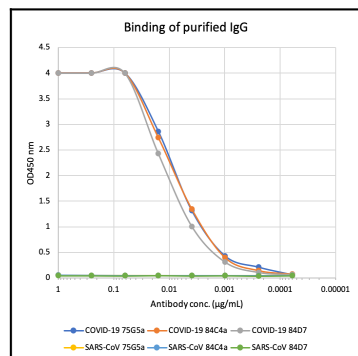


Figure-1: Microtiter wells were coated with SARS-CoV-2 Nucleocapsid Protein and SARS-CoV NP at 1  $\mu$ g/mL. Purified rabbit monoclonal antibodies 75G5a (12-4001), 84C4a (12-4002) and 84D7 (12-4003) were serially diluted 1:2 starting at 1  $\mu$ g/mL. Rabbit monoclonal antibodies 75G5a, 84C4a, and 84D7 show very strong and specific binding to COVID-19 NP antigen, with no significant cross-reactivity to SARS-CoV NP antigen.

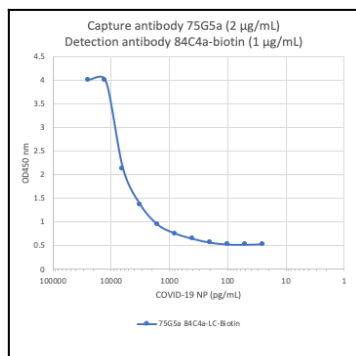


Figure-2: A sandwich ELISA was performed using SARS-CoV-2 Nucleocapsid Protein (NP) specific rabbit monoclonal antibodies: 75G5a (Cat# 12-4001) as a capture antibody and 84C4a-biotin as a detection antibody. COVID-19 NP was serially diluted 1:2 starting at 25 ng/mL. Rabbit monoclonal antibodies 75G5a and 84C4a-biotin detected COVID-19 NP antigen at very high sensitivity as low as 100 pg/mL (100 pg).

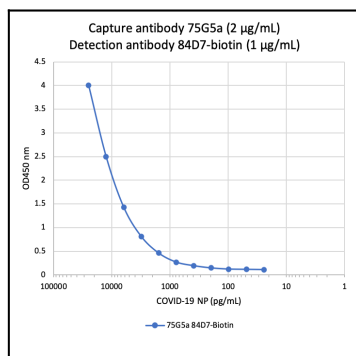


Figure-3: A sandwich ELISA was performed using SARS-CoV-2 Nucleocapsid Protein specific rabbit monoclonal antibodies: 75G5a (Cat# 12-4001) as a capture antibody and 84D7-biotin as a detection antibody. COVID-19 NP was serially diluted 1:2 starting at 25 ng/mL. Rabbit monoclonal antibodies 75G5a and 84D7-biotin detected COVID-19 NP antigen at very high sensitivity as low as 25 pg/mL (25 pg).