

Monoclonal Pan Anti-Influenza A Virus Nucleoprotein (NP) (produced *in vitro*)

Catalog No. NR-59594

Sino Biological Catalog No. 40208-MM03

For research use only. Not for use in humans.

Contributor and Manufacturer:

Sino Biological, Inc., Wayne, Pennsylvania, USA

Product Description:

Antibody Class: IgG1

Clone: 03

Mouse monoclonal antibody prepared against the nucleoprotein (NP) of influenza A virus was purified from hybridoma supernatant by protein A affinity chromatography. The B cell hybridoma was generated by the fusion of mouse myeloma cells with splenocytes from mice immunized with purified recombinant Influenza A H3N2 (A/Hong Kong/1/1968) NP protein (Sino Biological Cat # 40208-V08B; GenPept: [P22435.2](#); Met1-Asn498).¹

Material Provided:

Each vial of NR-59594 contains approximately 50 µL of monoclonal antibody in phosphate buffered saline (PBS). The concentration, expressed as mg/mL, is shown on the Certificate of Analysis.

Packaging/Storage:

NR-59594 was packaged aseptically in screw-capped plastic vials and is provided frozen on dry ice. The product should be stored at -20°C to -80°C immediately upon arrival. NR-59594 can be stored at 2°C to 8°C for one month without detectable loss of activity. Freeze-thaw cycles should be avoided.

Functional Activity:

NR-59594 widely recognizes NP of Influenza A virus (Figures 1 and 2). Information on cross-reactivity in western blot is shown in Table 1. The optimal concentration and dilution of the antibody to be used in a specific application should be determined by the user.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Monoclonal Pan Anti-Influenza A Virus Nucleoprotein (NP) (produced *in vitro*), NR-59594."

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. [Biosafety in Microbiological and Biomedical Laboratories \(BMBL\)](#). 6th ed. Washington, DC: U.S. Government Printing Office, 2020.

Disclaimers:

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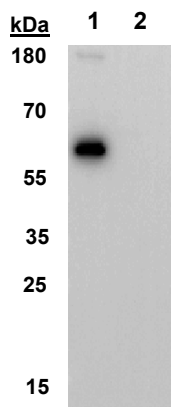
References:

1. Lu, J., Personal Communication.

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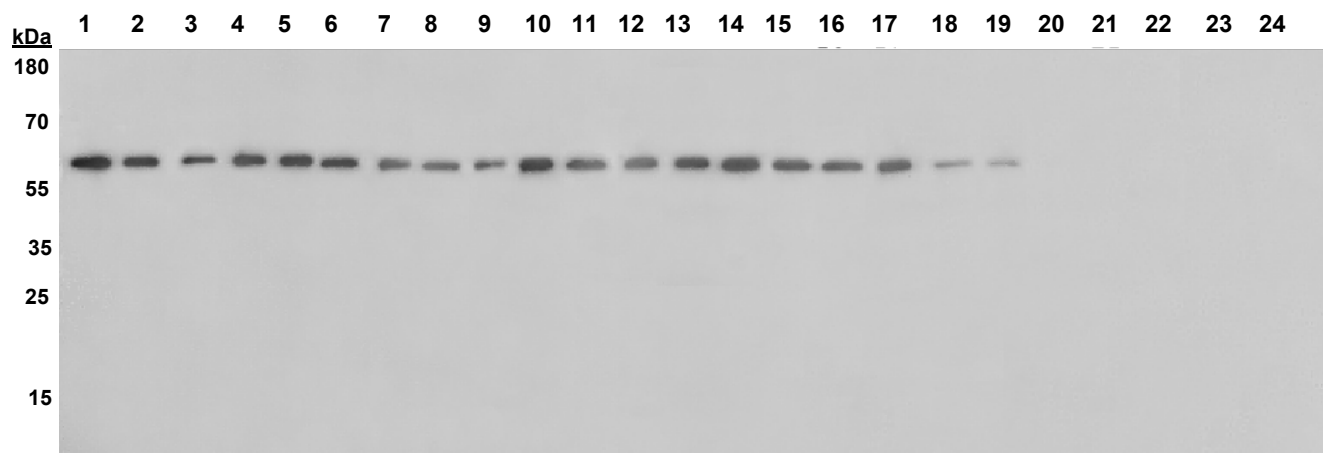


Figure 1: Representative Western Blot of NR-59594



Lane 1: Influenza A H3N2 (A/Darwin/9/2021)/(A/Darwin/6/2021) NP (Sino Biological 40858-V08B) (10 ng)
Lane 2: Influenza B (B/Austria/1359417/2021) NP (Sino Biological 40858-V08B) (10 ng)

Figure 2: Representative Western Blot showing the specificity of NR-59594



Lane 1: H1N1 (A/Brevig Mission/1/1918) NP (Catalog# 40204-V08B)
 Lane 2: H1N1 (A/Brisbane/02/2018) NP (Catalog# 40776-V08B)
 Lane 3: H1N1 (A/California/07/2009) NP (Catalog# 40205-V08B)
 Lane 4: H1N1 (A/Guangdong-Maonan/SWL1536/2019) NP (Catalog# 40723-V08B)
 Lane 5: H1N1 (A/Hawaii/70/2019) NP (Catalog# 40724-V08B)
 Lane 6: H1N1 (A/Michigan/45/2015) NP (Catalog# 40777-V08B)
 Lane 7: H1N1 (A/Puerto Rico/8/34/Mount Sinai) NP (I116M) (Catalog# 11675-V08B)
 Lane 8: H1N1 (A/Victoria/2570/2019)/(A/Wisconsin/588/2019) NP (Catalog# 40774-V08B)
 Lane 9: H2N2 (A/Ann Arbor/6/1960) NP (Catalog# 40033-V08B)
 Lane 10: H3N2 (A/Aichi/2/1968) NP (Catalog# 40207-V08B)
 Lane 11: H3N2 (A/Cambodia/e0826360/2020 (H3N2)-like) NP (Catalog# 40778-V08B)
 Lane 12: H3N2 (A/Hong Kong/1/1968) NP (Catalog# 40208-V08B)
 Lane 13: H3N2 (A/Hong Kong/2671/2019) NP (Catalog# 40753-V08B)
 Lane 14: H3N2 (A/Hong Kong/45/2019) NP (Catalog# 40754-V08B)
 Lane 15: H3N2 (A/Hong Kong/4801/2014) NP (Catalog# 40781-V08B)
 Lane 16: H3N2 (A/Kansas/14/2017) NP (Catalog# 40779-V08B)
 Lane 17: H3N2 (A/Switzerland/9715293/2013) NP (Catalog# 40499-V08B)
 Lane 18: H7N9 (A/Anhui/1-BALF_RG6/2013) NP (Catalog# 40110-V08B)
 Lane 19: H7N9 (A/Shanghai/2/2013) NP (Catalog# 40111-V08B)
 Lane 20: Influenza B (B/Brisbane/60/2008) NP (Catalog# 40783-V08B)
 Lane 21: Influenza B (B/Colorado/06/2017) NP (Catalog# 40782-V08B)
 Lane 22: Influenza B (B/Florida/4/2006) NP (Catalog# 40438-V08B)
 Lane 23: Influenza B (B/Phuket/3073/2013) NP (Catalog# 40500-V08B)
 Lane 24: Influenza B (B/Washington/02/2019) NP (Catalog# 40755-V08B)

Sample: Recombinant Protein 10 ng

Table 1: Cross-reactivity of NR-59594 Nucleoprotein (NP) in ELISA and Western blot

Cross-reactivity	Immunogen	Catalog #. (Sino Biological)
ELISA and WB	H1N1 (A/Brevig Mission/1/1918) NP	40204-V08B
	H1N1 (A/Brisbane/02/2018) NP	40776-V08B
	H1N1 (A/California/07/2009) NP	40205-V08B
	H1N1 (A/Guangdong-Maonan/SWL1536/2019) NP	40723-V08B
	H1N1 (A/Hawaii/70/2019) NP	40724-V08B
	H1N1 (A/Michigan/45/2015) NP	40777-V08B
	H1N1 (A/Puerto Rico/8/34/Mount Sinai) NP	11675-V08B
	H1N1 (A/Victoria/2570/2019)/(A/Wisconsin/588/2019) NP	40774-V08B
	H2N2 (A/Ann Arbor/6/1960) NP	40033-V08B
	H3N2 (A/Aichi/2/1968) NP	40207-V08B
	H3N2 (A/Cambodia/e0826360/2020) NP	40778-V08B
	H3N2 (A/Darwin/9/2021)/(A/Darwin/6/2021) NP	40858-V08B
	H3N2 (A/Hong Kong/1/1968) NP	40208-V08B
	H3N2 (A/Hong Kong/2671/2019) NP	40753-V08B
	H3N2 (A/Hong Kong/45/2019) NP	40754-V08B
	H3N2 (A/Hong Kong/4801/2014) NP	40781-V08B
	H3N2 (A/Kansas/14/2017) NP	40779-V08B
	H3N2 (A/Switzerland/9715293/2013) NP	40499-V08B
	H7N9 (A/Anhui/1-BALF_RG6/2013) NP	40110-V08B
	H7N9 (A/Shanghai/2/2013) NP	40111-V08B
ELISA	H1N1 (A/Victoria/2454/2019) NP	40851-V08B
Minimal with ELISA	HCoV-HKU1 Nucleocapsid Protein	40642-V07E
	HCoV-OC43 Nucleocapsid Protein	40643-V07E
None in ELISA and WB	Influenza B (B/Austria/1359417/2021) NP	40861-V08B
	Influenza B (B/Brisbane/60/2008) NP	40783-V08B
	Influenza B (B/Colorado/06/2017) NP	40782-V08B
	Influenza B (B/Florida/4/2006) NP	40438-V08B
	Influenza B (B/Phuket/3073/2013) NP	40500-V08B
	Influenza B (B/Washington/02/2019) NP	40755-V08B
None in ELISA	SARS-CoV-2 Nucleocapsid Protein	40588-V08B
	HCoV-229E Nucleocapsid Protein	40640-V07E
	HCoV-NL63 Nucleocapsid Protein	40641-V07E