

Antibodies for Influenza Antigen Test

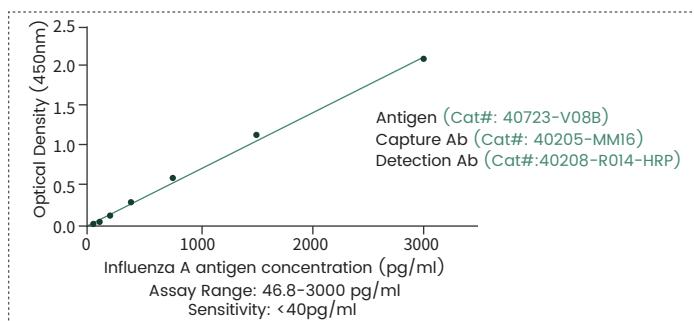
Influenza viral nucleoprotein (NP) is a structural protein that plays a critical role in virus replication and host adaptation. Antibodies targeting NP proteins are commonly used for immunodetection of influenza viruses in various assays, including ELISA, lateral flow assay (LFA), and direct fluorescent antibody tests. These assays can be used in both research and clinical diagnostics. Due to the high frequency of antigenic drift or shift among different influenza strains, broad-spectrum influenza antibodies are particularly desired for flu diagnostics.

Sino Biological has identified six Pan antibody pairs against the NP protein of Influenza A and Influenza B, respectively. These matched pairs have been validated in the sandwich ELISA assay with high sensitivity (pg level). They also demonstrate broad reactivity against a large cohort of flu strains.

Antibody Pairs for Pan Influenza A NP Detection

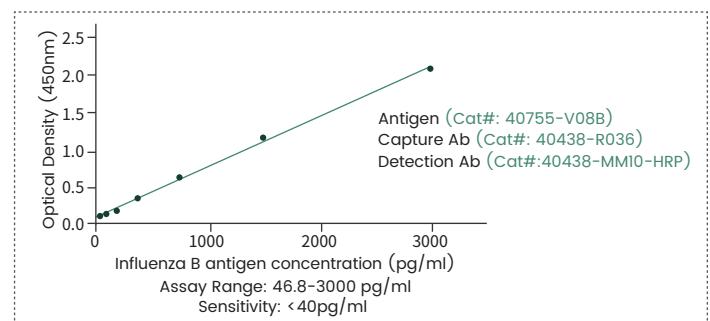
Pair No.	Capture Ab	Detection Ab
PanA-1	40205-MM16	40208-R014
PanA-2	40205-R063	40205-MM18
PanA-3	40208-R117	40205-MM18

High Sensitivity (pg level)



Antibody Pairs for Pan Influenza B NP Detection

Pair No.	Capture Ab	Detection Ab
PanB-1	40438-R004	40438-MM10
PanB-2	40438-R036	40438-MM10
PanB-3	40438-MM05	40438-R036



Broad Spectrum and High Specificity

These antibody pairs can detect a broad spectrum of strains within the target subtype, without any cross-reactivity with the other subtypes. 24 kinds of influenza antigens from A or B have been tested by ELISA assay

Antigens Pairs	A-1	A-2	A-3	A-4	A-5	A-6	A-7	A-8	A-9	A-10	A-11	A-12	A-13	A-14	A-15	A-16	A-17	A-18	A-19	B-1	B-2	B-3	B-4	B-5
PanA-1	Strong	Weak	Weak	Weak	Weak	Weak																		
PanA-2	Strong	Weak	Weak	Weak	Weak	Weak																		
PanA-3	Strong	Weak	Weak	Weak	Weak	Weak																		
PanB-1	Weak	Strong	Strong	Strong	Strong	Strong																		
PanB-2	Weak	Strong	Strong	Strong	Strong	Strong																		
PanB-3	Weak	Strong	Strong	Strong	Strong	Strong																		

Binding Capacity: Strong Weak

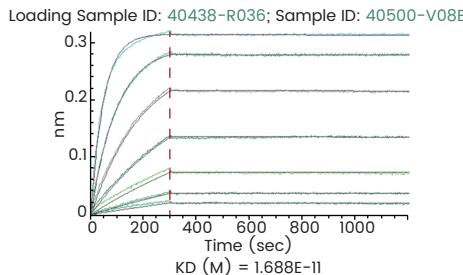
The Aforementioned Antigens:

- B-1: 40783-V08B (Influenza B, B/Brisbane/60/2008)
- B-2: 40782-V08B (Influenza B, B/Colorado/06/2017)
- B-3: 40438-V08B (Influenza B, B/Florida/4/2006)
- B-4: 40500-V08B (Influenza B, B/Phuket/3073/2013)
- B-5: 40755-V08B (Influenza B, B/Washington/02/2019)
- A-1: 40204-V08B (H1N1, A/Brevig Mission/1/1918)
- A-2: 40776-V08B (H1N1, A/Brisbane/02/2018)
- A-3: 40205-V08B (H1N1, A/California/07/2009)
- A-4: 40723-V08B (H1N1, A/Guangdong-Maonan/SWLI536/2019)
- A-5: 40724-V08B (H1N1, A/Hawaii/70/2019)
- A-6: 40777-V08B (H1N1, A/Michigan/45/2015)
- A-7: 11675-V08B (H1N1, A/Puerto Rico/8/34/Mount Sinai)

- A-8: 40774-V08B (H1N1, A/Victoria/2570/2019 | A/Wisconsin/588/2019)
- A-9: 40033-V08B (H2N2, A/Ann Arbor/6/1960)
- A-10: 40207-V08B (H3N2, A/Aichi/2/1968)
- A-11: 40778-V08B (H3N2, A/Cambodia/e0826360/2020 (H3N2)-like)
- A-12: 40208-V08B (H3N2, A/Hong Kong/1/1968)
- A-13: 40753-V08B (H3N2, A/Hong Kong/2671/2019)
- A-14: 40754-V08B (H3N2, A/Hong Kong/45/2019)
- A-15: 40781-V08B (H3N2, A/Hong Kong/4801/2014)
- A-16: 40779-V08B (H3N2, A/Kansas/14/2017)
- A-17: 40499-V08B (H3N2, A/Switzerland/9715293/2013)
- A-18: 40110-V08B (H7N9, A/Anhui/1-BALF_RG6/2013)
- A-19: 40111-V08B (H7N9, A/Shanghai/2/2013)

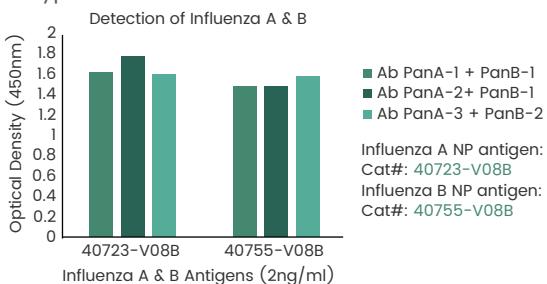
High Binding Affinity

The binding affinity between immobilized Influenza B NP protein (Cat#:40500-V08B) with the anti-NP antibody (Cat#:40438-R036) in BLI assay.



Antibody Cocktail Can Successfully Detect both A and B Type Flu

The combination of A and B antibody pairs can allow detection of both subtypes.



Other Pan Influenza NP Antibodies

16 Pan Influenza A or B Nucleoprotein antibodies have been developed and validated by ELISA and WB assays.

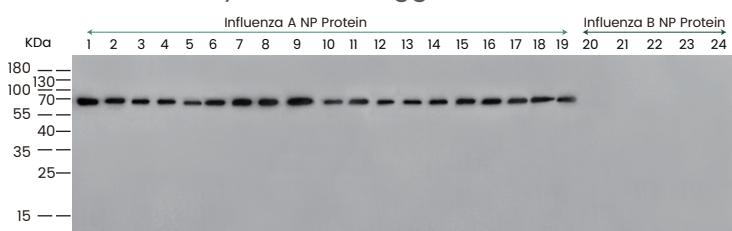
Pan Influenza A NP Antibodies

40208-MM03 40208-R014 40208-MM04 40208-R010 40208-R061
40208-R113 40208-R117 40205-MM16 40205-MM18 40205-R063

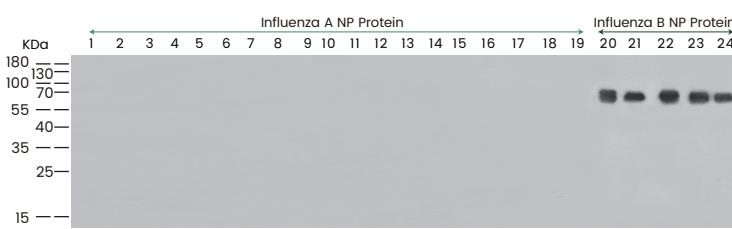
Pan Influenza B NP Antibodies

40438-MM05 40438-R016 40438-MM09
40438-R036 40438-R004 40438-MM10

Western Blot Analysis of Hemagglutinin Antibodies to 24 Influenza Antigens

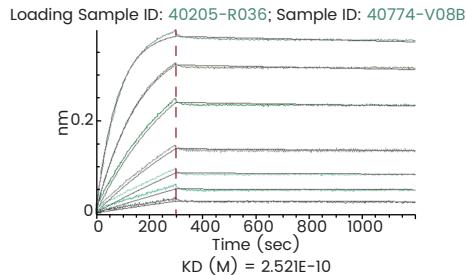


Anti-Influenza A NP rabbit mAb (Cat#: 40208-R010) at 1:2000 dilution.



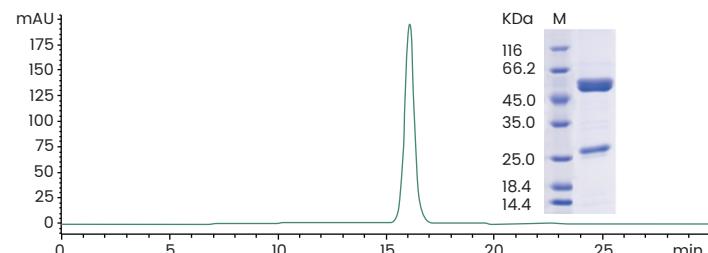
Anti-Influenza B NP rabbit mAb (Cat#: 40438-R036) at 1:2000 dilution.

The binding affinity between immobilized Influenza A NP protein (Cat#: 40774-V08B) with the anti-NP antibody (Cat#: 40205-R063) in BLI assay.



High Production Quality

Our products and processes are ISO13485 certified. The purity of these antibodies is >95% as assessed by SEC-HPLC.



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

*: Antigen from 2015-2022 Influenza Vaccine Strain



Sino Biological US Inc. (U.S.A.)

Tel: +1-215-583-7898

Email: order_us@sinobiologicalus.com

Sino Biological Europe GmbH (Europe)

Tel: +49(0)6196 9678656

Email: order_eu@sinobiologicaeu.com

www.sinobiological.com



株式会社日本シノバイオロジカル (Japan)

電話番号: 044-400-1330

ご注文: order@sinobiological.co.jp