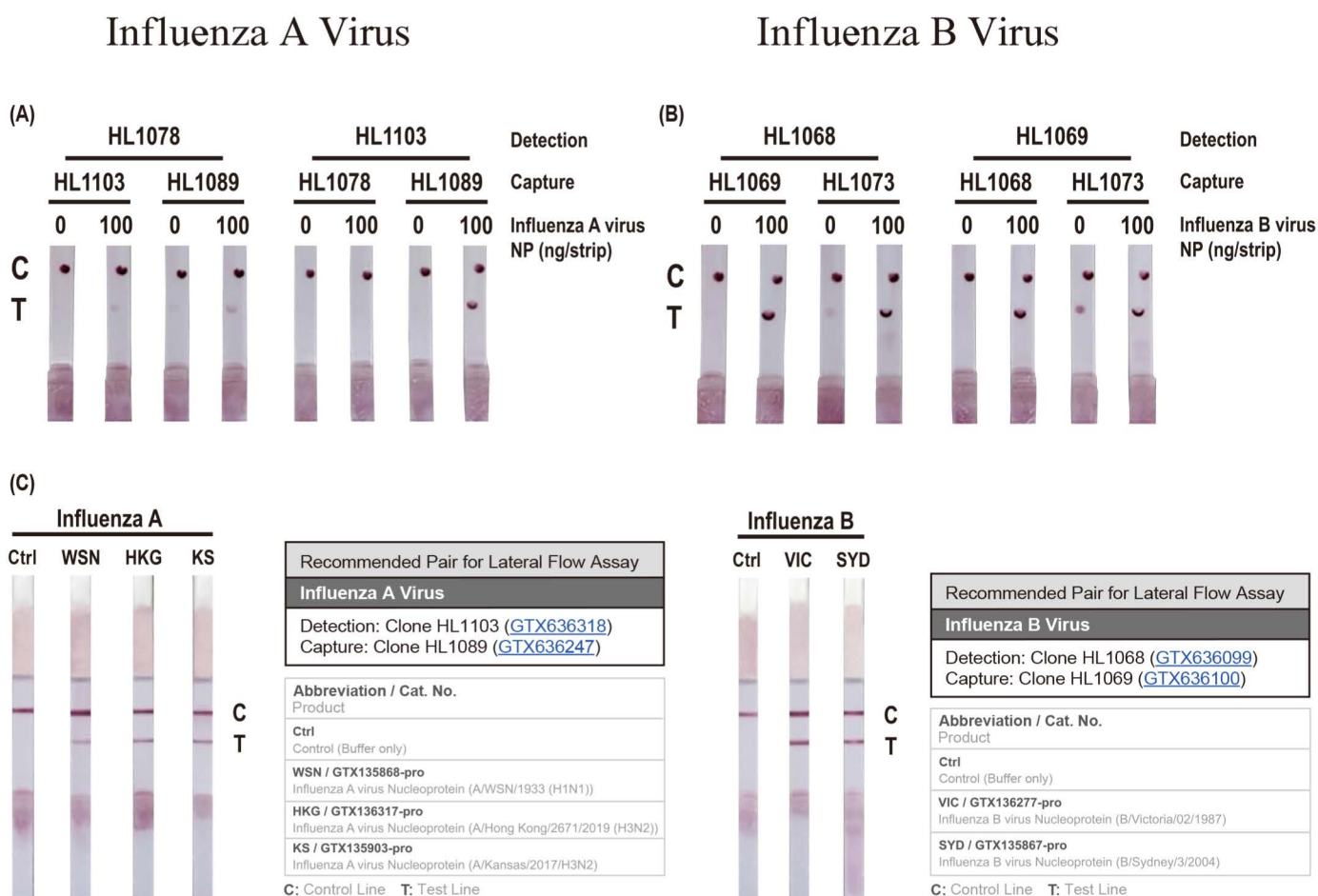


# Influenza A and B Virus Recombinant Monoclonal Antibodies

GeneTex has expanded its already extensive reagent catalog for influenza virus research with a series of recombinant rabbit monoclonal antibodies targeting the influenza A virus (FLUAV) and influenza B virus (FLUBV) nucleoproteins (NPs). These high-quality antibodies are validated for use in lateral flow assay (LFA; Figure 1), and the recommended LFA pairs are listed in Tables 1-2.



**Figure 1. Detection of FLUAV and FLUBV NPs in lateral flow assays.**

Recombinant NPs derived from influenza A virus (A) and influenza B virus (B) were detected by lateral flow assay using the indicated recombinant rabbit monoclonal antibody pairs. HL1078: Influenza A virus Nucleoprotein antibody [HL1078] ([GTX636199](#)); HL1089: Influenza A virus Nucleoprotein antibody [HL1089] ([GTX636247](#)); HL1103: Influenza A virus Nucleoprotein antibody [HL1103] ([GTX636318](#)); HL1068: Influenza B virus Nucleoprotein antibody [HL1068] ([GTX636099](#)); HL1069: Influenza B virus Nucleoprotein antibody [HL1069] ([GTX636100](#)); HL1073: Influenza B virus Nucleoprotein antibody [HL1073] ([GTX636194](#)); Sample: Influenza A virus Nucleoprotein (NP) (A/WSN/1933 (H1N1)), DDDDK Tag ([GTX135868-pro](#)); Sample: Influenza B virus Nucleoprotein (NP) (B/Sydney/3/2004), DDDDK Tag ([GTX135867-pro](#)). (C) Detection of FLUAV or FLUBV NPs by lateral flow assay is further confirmed using the indicated recombinant rabbit monoclonal antibody pairs.



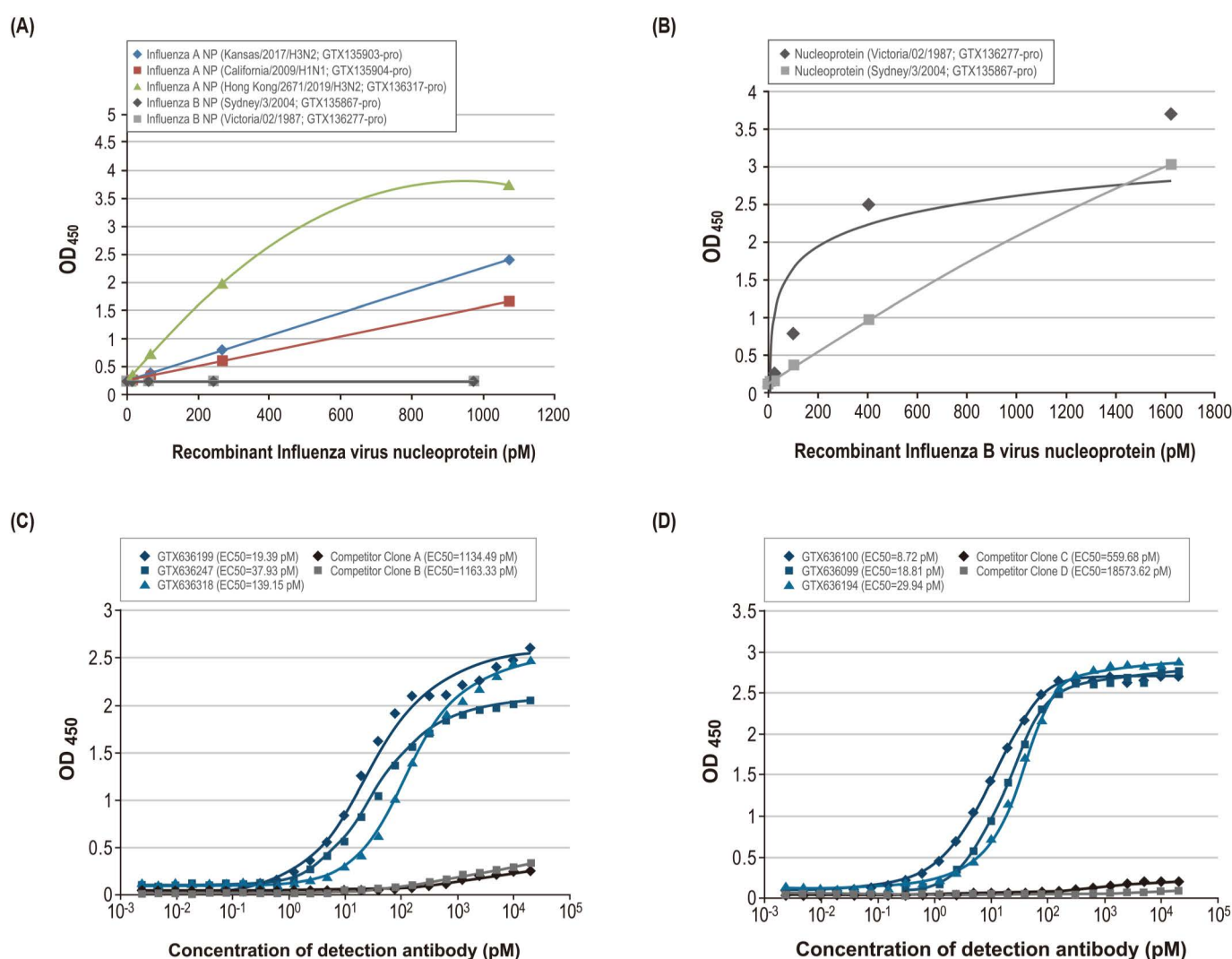
**Table 1.** The FLUAV Antibody Pair for Lateral Flow Assay

| Detection                                  | Capture                                    |
|--------------------------------------------|--------------------------------------------|
| Clone HL1103 ( <a href="#">GTX636318</a> ) | Clone HL1089 ( <a href="#">GTX636247</a> ) |

**Table 2.** The FLUBV Antibody Pair for Lateral Flow Assay

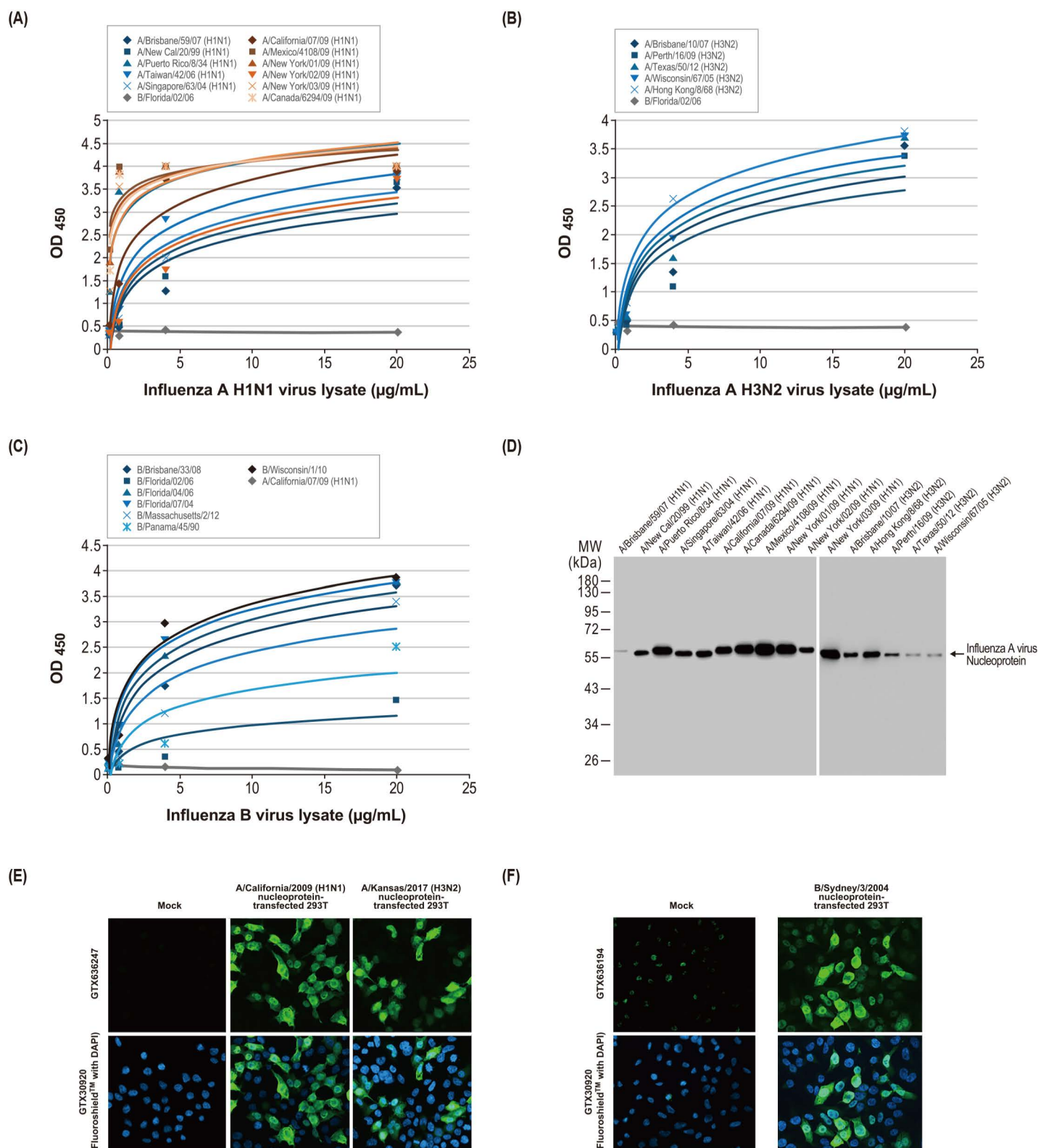
| Detection                                  | Capture                                    |
|--------------------------------------------|--------------------------------------------|
| Clone HL1068 ( <a href="#">GTX636099</a> ) | Clone HL1069 ( <a href="#">GTX636100</a> ) |

In addition, the antibodies are available as matched pairs for sandwich ELISA (sELISA) with sensitivities in the low picomolar range and superior EC<sub>50</sub> values compared to other market-leading clones (Figure 2).

**Figure 2.** Detection of FLUAV and FLUBV NPs in ELISA assays.

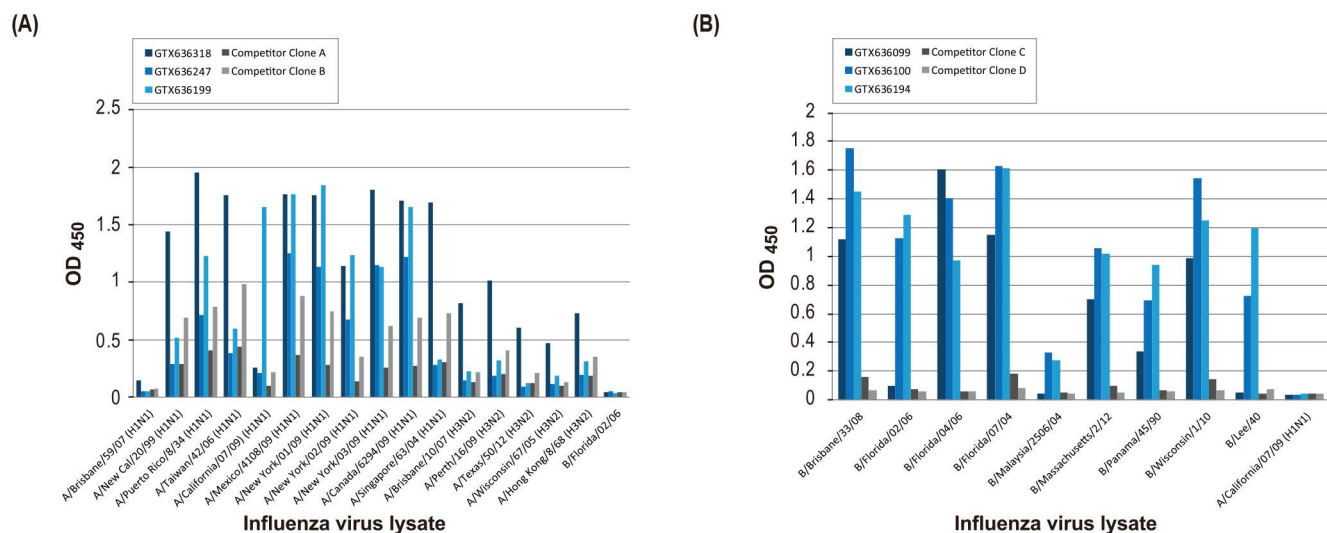
Recombinant NPs derived from different strains of influenza A virus and influenza B virus were assayed by sELISA using (A) FLUAV NP antibodies [GTX636318](#) and [GTX636247](#) (as a pair), or (B) FLUBV NP antibodies [GTX636099](#) and [GTX636100](#) (as a pair). Indirect ELISA demonstrates the superior EC<sub>50</sub> values of (C) FLUAV NP antibodies [GTX636199](#), [GTX636247](#), and [GTX636318](#), as well as of (D) FLUBV NP antibodies [GTX636100](#), [GTX636099](#), and [GTX636194](#), compared to a competitor's clones.

Importantly, at least sixteen FLUAV strains and nine FLUBV strains can be detected by ELISA, western blot and immunocytochemistry, including FLUAV H1N1 and H3N2 subtypes (Figure 3). These recombinant antibodies showed higher sensitivities compared to the competitor's clones (Figure 4). This data demonstrates the potential value of these recombinant antibodies for diagnostic applications.



**Figure 3. Analysis of influenza virus strains.**

Sandwich ELISA detects NPs in lysates from cells infected with different strains of (A) influenza A virus subtype H1N1 or (B) subtype H3N2 using FLUAV NP antibodies [GTX636318](#) and [GTX636247](#) (as a pair), or (C) influenza B virus using FLUBV NP antibodies [GTX636099](#) and [GTX636100](#) (as a pair). (D) The FLUAV NP antibody [GTX636199](#) recognizes NPs of various FLUAV subtypes in infected-cell lysates by western blot. (E-F) Immunocytochemistry using FLUAV NP antibody [GTX636247](#) (E) or FLUBV NP antibody [GTX636194](#) (F) on NP gene-transfected 293T cells.



**Figure 4. Comparison of GeneTex recombinant antibodies and market-leading clones.**

Indirect ELISA assays exhibit the comparative sensitivities of (A) FLUAV NP antibodies [GTX636318](#), [GTX636247](#), and [GTX636199](#), as well as of (B) FLUBV NP antibodies [GTX636099](#), [GTX636100](#), and [GTX636194](#), compared to a competitor's clones.

A complete list of applications is shown below for each featured recombinant protein and antibody (Tables 3-4).

**Table 3. Featured recombinant proteins and antibodies for FLUAV research**

| Cat. No.                      | Product Name                                                                      | Clonality | Applications                                 |
|-------------------------------|-----------------------------------------------------------------------------------|-----------|----------------------------------------------|
| <a href="#">GTX135903-pro</a> | Influenza A virus Nucleoprotein protein (A/Kansas/2017/H3N2), DDDDK Tag           | N/A       | ELISA                                        |
| <a href="#">GTX135904-pro</a> | Influenza A virus Nucleoprotein protein (A/California/2009 (H1N1)), DDDDK Tag     | N/A       | ELISA                                        |
| <a href="#">GTX136317-pro</a> | Influenza A virus Nucleoprotein protein (A/Hong Kong/2671/2019 (H3N2)), DDDDK Tag | N/A       | ELISA                                        |
| <a href="#">GTX135868-pro</a> | Influenza A virus Nucleoprotein protein (A/WSN/1933 (H1N1)), DDDDK Tag            | N/A       | ELISA, Sandwich ELISA                        |
| <a href="#">GTX629633</a>     | Influenza A virus Nucleoprotein antibody [GT1236]                                 | Ms mAb    | WB, ICC/IF, IHC-P, ELISA, Sandwich ELISA     |
| <a href="#">GTX629544</a>     | Influenza A virus Nucleoprotein antibody [GT778]                                  | Ms mAb    | WB                                           |
| <a href="#">GTX636199</a>     | Influenza A virus Nucleoprotein antibody [HL1078]                                 | Rb mAb    | WB, ICC/IF, ELISA, Sandwich ELISA            |
| <a href="#">GTX636247</a>     | Influenza A virus Nucleoprotein antibody [HL1089]                                 | Rb mAb    | WB, ICC/IF, ELISA, Sandwich ELISA            |
| <a href="#">GTX636282</a>     | Influenza A virus Nucleoprotein antibody [HL1098]                                 | Rb mAb    | WB, ICC/IF, ELISA, Sandwich ELISA            |
| <a href="#">GTX636318</a>     | Influenza A virus Nucleoprotein antibody [HL1103]                                 | Rb mAb    | WB, ICC/IF, ELISA, Sandwich ELISA            |
| <a href="#">GTX125989</a>     | Influenza A virus Nucleoprotein antibody                                          | Rb pAb    | WB, ICC/IF, IHC-P, IP, ELISA, Sandwich ELISA |
| <a href="#">GTX127357</a>     | Influenza A virus H1N1 HA (Hemagglutinin) antibody                                | Rb pAb    | WB, ICC/IF, IHC-P, ELISA                     |
| <a href="#">GTX629750</a>     | Influenza A virus H1N1 HA (Hemagglutinin) antibody [GT223]                        | Ms mAb    | WB, ICC/IF                                   |
| <a href="#">GTX629746</a>     | Influenza A virus H1N1 HA (Hemagglutinin) antibody [GT521]                        | Ms mAb    | WB                                           |
| <a href="#">GTX125974</a>     | Influenza A virus H1N1 NA (Neuraminidase) antibody                                | Rb pAb    | WB                                           |
| <a href="#">GTX629696</a>     | Influenza A virus H1N1 NA (Neuraminidase) antibody [GT288]                        | Ms mAb    | WB, ICC/IF                                   |
| <a href="#">GTX127363</a>     | Influenza A virus H3N2 HA (Hemagglutinin) antibody                                | Rb pAb    | WB, IHC-P                                    |
| <a href="#">GTX632358</a>     | Influenza A virus H5N1 HA (Hemagglutinin) antibody [1D10]                         | Ms mAb    | WB, ICC/IF                                   |
| <a href="#">GTX127984</a>     | Influenza A virus H5N1 NA (Neuraminidase) antibody                                | Rb pAb    | WB                                           |
| <a href="#">GTX127303</a>     | Influenza A virus H7N7 HA (Hemagglutinin) antibody                                | Rb pAb    | WB                                           |
| <a href="#">GTX127302</a>     | Influenza A virus H7N7 HA (Hemagglutinin) antibody                                | Rb pAb    | WB                                           |
| <a href="#">GTX127307</a>     | Influenza A virus H9N2 HA (Hemagglutinin) antibody                                | Rb pAb    | WB                                           |
| <a href="#">GTX125928</a>     | Influenza A virus M1 (Matrix protein) antibody                                    | Rb pAb    | WB, ICC/IF                                   |

**Table 3.** Featured recombinant proteins and antibodies for FLUAV research

| Cat. No.                                                                                                    | Product Name                                                      | Clonality | Applications      |
|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-----------|-------------------|
|  <a href="#">GTX127356</a> | Influenza A virus M1 (Matrix protein) antibody                    | Rb pAb    | WB, ELISA         |
|  <a href="#">GTX125951</a> | Influenza A virus M2 (Matrix protein) antibody                    | Rb pAb    | WB, ICC/IF        |
|  <a href="#">GTX125990</a> | Influenza A virus NS1 (Nonstructural protein 1) antibody          | Rb pAb    | WB, ICC/IF, IHC-P |
|  <a href="#">GTX633685</a> | Influenza A virus NS1 (Nonstructural protein 1) antibody [GT1653] | Ms mAb    | WB                |
|  <a href="#">GTX125953</a> | Influenza A virus NS2 (Nonstructural protein 2/NEP) antibody      | Rb pAb    | WB, ICC/IF        |
|  <a href="#">GTX125952</a> | Influenza A virus NS2 (Nonstructural protein 2/NEP) antibody      | Rb pAb    | WB                |
|  <a href="#">GTX118991</a> | Influenza A virus PA protein antibody                             | Rb pAb    | WB, ICC/IF        |
|  <a href="#">GTX125932</a> | Influenza A virus PA protein antibody                             | Rb pAb    | WB, ICC/IF        |
|  <a href="#">GTX125923</a> | Influenza A virus PB1 protein antibody                            | Rb pAb    | WB, ICC/IF        |
|  <a href="#">GTX125926</a> | Influenza A virus PB2 protein antibody                            | Rb pAb    | WB, ICC/IF        |

 Citation Support
**Table 4.** Featured recombinant proteins and antibodies for FLUBV research

| Cat. No.                                                                                                      | Product Name                                                    | Clonality | Applications                      |
|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-----------|-----------------------------------|
| <a href="#">GTX135867-pro</a>                                                                                 | Influenza B virus Nucleoprotein (B/Sydney/3/2004), DDDDK Tag    | N/A       | ELISA                             |
| <a href="#">GTX136277-pro</a>                                                                                 | Influenza B virus Nucleoprotein (B/Victoria/02/1987), DDDDK Tag | N/A       | ELISA                             |
|  <a href="#">GTX636099</a>   | Influenza B virus Nucleoprotein antibody [HL1068]               | Rb mAb    | WB, ICC/IF, ELISA, Sandwich ELISA |
|  <a href="#">GTX636100</a>   | Influenza B virus Nucleoprotein antibody [HL1069]               | Rb mAb    | WB, ICC/IF, ELISA, Sandwich ELISA |
|  <a href="#">GTX636194</a>  | Influenza B virus Nucleoprotein antibody [HL1073]               | Rb mAb    | WB, ICC/IF, ELISA, Sandwich ELISA |
| <a href="#">GTX629882</a>                                                                                     | Influenza B virus Nucleoprotein antibody [GT371]                | Ms mAb    | WB, ICC/IF, ELISA, Sandwich ELISA |
| <a href="#">GTX629883</a>                                                                                     | Influenza B virus Nucleoprotein antibody [GT382]                | Ms mAb    | WB, ICC/IF, ELISA, Sandwich ELISA |
|  <a href="#">GTX128538</a> | Influenza B virus Nucleoprotein antibody                        | Rb pAb    | WB, ICC/IF, ELISA, Sandwich ELISA |
|  <a href="#">GTX128539</a> | Influenza B virus Nucleoprotein antibody                        | Rb pAb    | WB, ICC/IF, ELISA, Sandwich ELISA |
| <a href="#">GTX135819</a>                                                                                     | Influenza B virus Nucleoprotein antibody                        | Rb pAb    | WB                                |
| <a href="#">GTX128543</a>                                                                                     | Influenza B virus Hemagglutinin (HA) antibody                   | Rb pAb    | WB, ICC/IF                        |
| <a href="#">GTX128542</a>                                                                                     | Influenza B virus Hemagglutinin (HA) antibody                   | Rb pAb    | WB, ICC/IF                        |
| <a href="#">GTX128537</a>                                                                                     | Influenza B virus M (Matrix protein) antibody                   | Rb pAb    | WB, ICC/IF                        |
| <a href="#">GTX128536</a>                                                                                     | Influenza B virus M (Matrix protein) antibody                   | Rb pAb    | WB                                |
| <a href="#">GTX128541</a>                                                                                     | Influenza B virus Neuraminidase (NA) antibody                   | Rb pAb    | ICC/IF                            |
| <a href="#">GTX128540</a>                                                                                     | Influenza B virus Neuraminidase (NA) antibody                   | Rb pAb    | ICC/IF                            |

 Citation Support
 Recombinant
 Comparable Abs


Scan For  
More Info

www.unibiotech.in

Universal Biotechnology Private Limited

+91 9910 73 8844 ✉ info@unibiotech.in