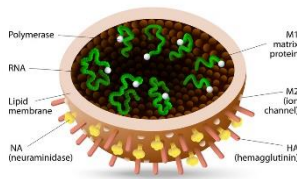


Influenza A & B Vaccines: Antibody ELISA Kits, Recombinant Proteins, Peptides and Antibodies

INFLUENZA VIRUS



Influenza A virus causes influenza in **birds and some mammals**, and is the only species of influenza virus A. Occasionally, viruses are transmitted from wild aquatic birds to domestic poultry, and this may cause an outbreak or give rise to human influenza pandemics. The physical

structure of all influenza A virus is similar. The Influenza A virus genome is contained on eight single (non-paired) RNA strands that code for eleven proteins (**HA, NA, NP, M1, M2, NS1, NEP, PA, PB1, PB1-F2, PB2**). There are 17 different H antigens (**H1 to H17**) and nine different N antigens (**N1 to N9**). Influenza A virus subtype H5N1, also known as "**bird flu**", A(H5N1) or simply H5N1, is a subtype of the influenza A virus which can cause illness in humans and many other animal species. Influenza viruses have a relatively high mutation rate that is characteristic of RNA viruses. The influenza vaccination, also known as a **flu shot**, is an **annual vaccination** using a vaccine specific for a given year.

Influenza A Vaccines-

WHO 2015-2016 influenza season (Trivalent Vaccines)

- an A/California/7/2009 (H1N1)pdm09-like virus;
- an A/Switzerland/9715293/2013 (H3N2)-like virus;
- a B/Phuket/3073/2013-like virus.

Quadrivalent vaccines containing **two influenza B viruses** contain the above three viruses and a **B/Brisbane/60/2008-like virus**.



Fluzone is a split-virus vaccine that is produced by chemical disruption of the influenza virus. Fluzone is recommended for influenza season: (A/California/07/2009 NYMC X-179A (H1N1), A/Victoria/361/2011 IVR-165 (H3N2) and B/Texas/6/2011 (a B/Wisconsin/1/2010-like virus).



Fluarix Quadrivalent (4 influenza virus strains: A/Christchurch/16/2010 NIB-74XP (H1N1) (an A/California/7/2009-like virus), A/Switzerland/9715293/2013 NIB-88 (H3N2)

B/Phuket/3073/2013, and B/Brisbane/60/2008; all viruses are grown in chicken eggs). **FLUVIRIN®** is a trivalent, sub-unit (purified surface antigen) influenza virus vaccine prepared from virus propagated in chicken eggs. A/Christchurch/16/2010, NIB-74 (H1N1) (an A/California/7/2009 pdm09-like virus); A/Switzerland/9715293/2013, NIB-88 (H3N2) (an A/Switzerland/9715293/2013-likevirus); and B/Phuket/3073/2013 - wild type (a B/Phuket/3073/2013-like virus). **FLULAVAL**, Influenza Vaccine is a trivalent, split-virion, inactivated influenza virus vaccine produced in chicken eggs (A/California/7/2009 NYMC X-179A (H1N1), A/Switzerland/9715293/2013 NIB-88 (H3N2), and B/Phuket/3073/2013. **AFLURIA**, Influenza Vaccine is also propagated in chicken eggs (A/California/7/2009 (H1N1), NYMC X-181, A/South Australia/55/2014 (H3N2), 448 IVR-175, (an A/Switzerland/9715293/2013-like strain) and B/Phuket/3073/2013).

Influenza B: The only species in this genus is called Influenza B virus infecting only humans and seals. Influenza virus B mutates at a rate 2 to 3 times slower than type A. However, influenza B mutates enough that lasting immunity is not possible.

About ADI Influenza A ELISA Kits-ADI has produced recombinant proteins (HA, NP, NS1) made antibodies, and developed antibody ELISA kits using the recombinant proteins or whole viral antigens (inactivated). The ELISA kits can be used to assess immune status of humans and animals and to determine or formulate new vaccines. Antibodies ELISA kits are available for human, mouse, rabbit, and monkey to detect antibodies of IgG/IgM subtypes. Antibody ELISA kits for other species and isotypes not listed here can be made available as well.

Influenza A Vaccine Related ELISA kits

Items Description	Antigens	Species	Antibody Type IgG Cat#	Antibody Type IgM Cat#	Antibody Type IgA Cat#
Influenza A Virus antibody ELISA kits, 96 tests	HA (H3N2)	Swine/Pig	920-010-PAG	920-020-PAM	920-030-PAA
	Whole virus (H1N1)	Human	920-040-HAG	920-050-HAM	920-060-HAA
	Rabbit (H1N1)	Rabbit	920-070-H1G		
	HA (H5N1)	Human	920-080-H5G	920-085-H5M	
	Whole avian virus	Chicken (avian)	920-100-AIV	920-105-AIM	
	HA (H5N1)	Chicken	920-300-H51		
Influenza A Virus Nucleoprotein (NP) IgG ELISA kit	NP (H1/N1)	Human	920-360-HNG	920-365-HNM	
Influenza B Virus antibody ELISA kits	Viral proteins	Human	920-400-HBG	920-405-HBM	920-410-HBA
		Mouse	920-500-MBG		
		Rabbit	920-605-RBG	920-610-RBM	

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Influenza A Vaccines Antibody ELISA Kits, Recombinant Proteins, Peptides and Antibodies

Catalog#	Product Description	Product Type
AB-23091-A	Rabbit Anti-Influenza A virus HA IgG	Antibodies
AB-23091-P	Influenza A virus HA Control peptide	peptides
AR-242-U	Human Influenza A virus H3N2 (P30-10-16), RNA Aptamer, unlabeled	RNA Aptamers
H11N2-01-A	Anti-Hemagglutinin HA1 Influenza A Virus (H11N2; A/duck/Yangzhou/906/2002) IgG	Pure protein
H11N2-01-C	Recomb. Hemagglutinin Influenza A Virus (H11N2; A/duck/Yangzhou/906/2002) protein control for Western	Pure protein
H1N1-01-A	Anti-Hemagglutinin Influenza A Virus H1N1 H1 (H1N1) (A/New Caledonia/20/99) IgG	Pure protein
H1N1-01-C	Recomb. Purified HA Influenza A Virus H1N1 H1 (H1N1) (A/New Caledonia/20/99) protein control for Western	Pure protein
H1N1-01-R-10	Recomb. (HEK) Purified Hemagglutinin Influenza A Virus H1N1 H1 (H1N1) (A/New Caledonia/20/99) protein (>95%, his-tag)	Pure protein
H1N1-02-A	Anti-Hemagglutinin Influenza A Virus H1N1 H1 (Pan H1N1 reacts with multiple strains of H1N1) IgG, purified	Pure protein
H1N12-R-10	Recomb. Purified Hemagglutinin HA1 (A/California/06-2009, H1N1) protein	Pure protein
H1N13-M	Human monoclonal anti-Influenza A hemeagglutinin (HA) IgG (IgG1, Recomb. HEK cells, >95%) (Pan antibody, neutralizing for H1, H2, H5, H6, H8, H9 etc)	Antibodies
H1N1NA11-C	Purified Influenza A Neuraminidase (H1N1-NA) protein control for western blot	Western control
H1N1NA11-S	Rabbit Anti Influenza A Neuraminidase (H1N1-NA) antiserum	Antibodies
H1N1NA15-R-10	Recomb. (E.coli, his tag) Influenza A Neuraminidase (H1N1-NA) protein (>95%)	Rec. Protein
H1NP21-A	Anti-Influenza A H1N1-NP/1-320aa protein (A/06/California/2009) IgG, aff pure	Antibodies
H1NP25-R-25	Recomb. (HEK) Influenza A n(H1N1-NP/1-320aa) protein (A/06/California/2009, >95%, His-tag)	Rec. Protein
H1NP26-R-25	Recomb. (HEK) purified Influenza A nucleoprotein (H1N1-NP/1-486aa) protein (A/Brisbane/59/2007, >95%, His-tag)	Rec. Protein
H1NP27-R-25	Recomb. (HEK) purified Influenza A nucleoprotein (H1N1-NP/1-498aa) protein (A/Puerto Rico/8/1934, >95%, His-tag)	Rec. Protein
H5N11-C	Recomb. Purified Hemagglutinin Influenza A Virus H5N1 H5 (H5N1) (A/chicken/India/NIV33487/2006) (17-531aa) protein control for Western	Pure protein
H5N11-S	Anti-Hemagglutinin Influenza A Virus H5N1 H5 (H5N1) (A/chicken/India/NIV33487/2006) (17-531aa) protein antiserum	Antibodies
H5N13-S	Anti-Hemagglutinin Influenza A Virus H5N1 H5 (H5N1) (A/chicken/India/NIV33487/2006) (17-531aa) protein antiserum	Antibodies
H5N15-R-10	Recomb. Purified Hemagglutinin Influenza A Virus H5N1 H5 (H5N1) (A/chicken/India/NIV33487/2006) (17-531aa), His-tag	Pure protein
H5N15-R-100	Recomb. HA Influenza A Virus H5N1 H5 (H5N1) (A/chicken/India/NIV33487/2006) (17-531aa), His-tag	Pure protein
HA11-M	Anti-Influenza A hemeagglutinin A1 (HA1/head domain/18-344aa) protein (A/Beijing/262/95)(H1N1) IgG, aff pure	Antibodies
HA15-R-25	Recomb. (HEK) Influenza A hemeagglutinin A1 (HA1/head domain/18-345aa) protein (A/PR/8/34/(H1N1), >95%, His-tag)	Rec. Protein
HA16-R-25	Recomb. (HEK) purified Influenza A hemeagglutinin A1 (HA1/head domain/18-345aa) protein (A/New Caledonia/20/99(H1N1), >95%, His-tag)	Rec. Protein
HA1H011-25	Recomb. (HEK) purified Influenza A HA1 (H1N1) protein (Christchurch/16/2010)(H1N1)] 18-344aa, >95%, his-tag)	Rec. Protein
HA1H012-25	Recomb. (HEK) Influenza A HA1 (H1N1) protein (A/New Caledonia/20/99) 18-345aa, >95%, his-tag)	Rec. Protein
HA1H013-M	Anti-Influenza A HA1 (H1N1) (A/Beijing/262/95), 18-344aa) protein IgG	Rec. Protein
HA1H031-25	Recomb. (HEK) Influenza A HA1 (H3N2) protein (A/Beijing/32/92, 17-345aa, >95%, his-tag)	Rec. Protein
HA1H051-25	Recomb. (HEK) Influenza A HA1 (H5N1) protein (A/Cambodia/R0405050/2007) 24-341aa, >95%, his-tag)	Rec. Protein
HA1H071-25	Recomb. (HEK) Influenza A HA1 (H7N9) protein (A/Shanghai/2/2013(H7N9) 19-338aa, >95%, his-tag)	Rec. Protein

HA1H071-25	Recomb. (HEK) Influenza A HA1 (H7N3) protein (A/chicken/Jalisco/CPA1/2012) 19-344aa, >95%, his-tag)	Rec. Protein
HA1H091-25	Recomb. (HEK) HA1 (H9N2) protein (A/Hong Kong/1073/99) 19-339aa, >95%, his-tag)	Rec. Protein
HA1H091-25	Recomb. (HEK) HA1 (H9N2) protein (Guinea fowl/Hong Kong/WF10/99, 19-338aa, >95%, his-tag)	Rec. Protein
HA1H111-25	Recomb. (HEK) Influenza A HA1 (H11N2) protein (A/duck/Yangzhou/906/2002) 17-342aa, >95%, his-tag)	Rec. Protein
HA28-A	Anti-Influenza A HA2/stem or stalk domain/347-523aa) protein (A/Viet Nam/1203/2004(H5N1) IgG, aff pure	Rec. Protein
HA28-R-25	Recomb. (HEK) Influenza A HA2/stem or stalk domain/366-531aa) protein (A/Vietnam/1203/2004)(H5N1, >95%, His-tag)	Rec. Protein
HA2H011-25	Recomb. (HEK) purified Influenza A HA2 (H5N1) protein (A/Vietnam/1203/2004 366-531aa, >95%, his-tag)	Rec. Protein
HA2H012-A	Anti-Influenza A HA2 (H5N1) (A/Vietnam/1203/2004 366-531aa, >95%, his-tag) protein IgG	Rec. Protein
INFA11-M	Mouse Anti-Influenza A virus IgG, aff pure	Antibodies
MA-20170	Mouse Monoclonal Anti-Human Influenza A virus Nucleoprotein	Antibodies
RP-1520	Influenza A Virus (H1N1) Beijing 262/95	Pure protein
RP-1521	Influenza A Virus (H1N1) New Caledonia 20/99 IV 116	Pure protein
RP-1522	Influenza A Virus (H3N2) Shangdong 9/93	Pure protein
RP-1523	Influenza A Virus (H3N2) Kiev 301/94 like /Johannesburg 33/94	Pure protein
RP-1524	Influenza A Virus (H3N2) Panama 2007/99	Pure protein
RP-1525	Influenza A Virus (H1N1) Taiwan 1/86	Pure protein
RP-1625	Recomb. (HEK) HA Influenza A Virus H3N8 (A/equine/Gansu/7/2008) HA protein (1-344, His tag, >95%)	Pure protein
RP-638	Recomb. HA Influenza A Virus H1N1 New Caledonia 20/99 (HA protein full length, Sf9 cells)	Pure protein
RP-640	Recomb. HA Influenza A Virus H7N7 Netherlands 219/03	Pure protein
RP-641	Recomb. HA Influenza A Virus H5N1 Vietnam 1203/04	Pure protein
RP-642	Recomb. Hemagglutinin Influenza A Virus H3N2 New York 55/04 (HA protein full length, Sf9)	Pure protein
RP-643	Recomb. Hemagglutinin Influenza A Virus H3N2 Wyoming 3/03	Pure protein
RP-644	Recomb. Hemagglutinin Influenza A Virus H9N2 Hong Kong 1073/99	Pure protein
RP-645	Recomb. Hemagglutinin Influenza A Virus H1N1 California/06/2009	Pure protein
RP-647	Recomb. Hemagglutinin Influenza A Virus H3N2 Wisconsin 67/05	Pure protein
SP-58255-5	Influenza A NP (366 - 374) Strain A/NT/60/68	Pure Peptide
SP-68060-5	Influenza A NP (366 - 374) Strain A/PR/8/35	Pure Peptide
SP-86620-5	Influenza A NP (366 - 374)	Pure Peptide
HA1B011-25	Recomb (HEK) purified Influenza B HA1 protein (B/Texas/6/2011) 16-362aa, >95%, his-tag)	Rec. Protein
HA2B011-25	Recomb (HEK) purified Influenza B HA2 protein (B/Florida/4/2006) 362-555aa, >95%, mouse Fc-tag)	Rec. Protein
HA2B012-M	Mouse monoclonal anti-Influenza B HA2 protein IgG (reacts with B strains)	Rec. Protein
INFB15-M	Mouse Anti-Influenza B IgG, aff pure	Antibodies
MA-20171	Mouse Monoclonal Anti-Human Influenza B virus Nucleoprotein	Antibodies
RP-1526	Influenza B Virus Qingdao 102/91 (purified virus, inactivated)	Virus/inactivated
RP-1527	Influenza B Virus Tokio 53/99 (purified virus, inactivated)	Pure protein
RP-1528	Influenza B Virus Victoria 504/00 (purified 7/6/2011, inactivated)	Pure protein
RP-1591	Influenza B Virus Florida 04/06 (purified virus, inactivated)	Pure protein
RP-1592	Influenza B Virus Malaysia 2506/04 (purified virus, inactivated)	Virus/inactivated
RP-1593	Recomb. (insect cells) Hemagglutinin Influenza B Virus Malaysia 2506/04 (HA full length, insect cells)	Pure Protein
RP-646	Recomb HA Influenza B Virus Ohio 01/05 (HA full length, insect cells)	Pure protein
RP-648	Recom. HA Influenza B Virus Jiin 20/03 (HA full length, insect cells)	Pure protein

Influenza_A_Flr 160606A

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