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Seasonal H1N1 Hemagglutinin Antibody

Catalog # ASC10930

Product Information

Application	WB, E
Primary Accession	B0VX44
Other Accession	ACA28844, 168805691
Reactivity	Virus
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	62 KDa
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Hemagglutinin antibody can be used for the detection of the Hemagglutinin protein from the H1N1 strain of common influenza A in ELISA. It will detect 2 ng of free peptide at 1 □g/mL.

Additional Information

Target/Specificity	HA; This antibody is specific for the seasonal H1N1 influenza Hemagglutinin and will not recognize the corresponding Hemagglutinin sequence from the swine-origin H1N1 influenza (A/California/14/2009 (H1N1)). Will not cross-react with peptide corresponding to the swine-origin H1N1 influenza Hemagglutinin.
Reconstitution & Storage	Seasonal H1N1 Hemagglutinin antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	Seasonal H1N1 Hemagglutinin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Background

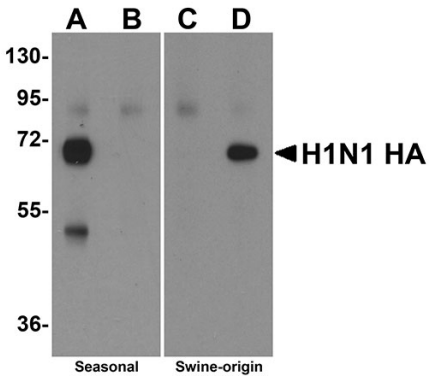
Seasonal H1N1 Hemagglutinin Antibody: Influenza A virus is a major public health threat, killing more than 30,000 people per year in the USA. In early 2009, a novel swine-origin influenza A (H1N1) virus was identified in specimens obtained from patients in Mexico and the United States. The virus spread quickly around the world and on June 11, 2009, the World Health Organization declared it a pandemic. Influenza A virus has one of sixteen possible Hemagglutinin (HA) surface proteins and one of nine possible Neuraminidase (NA) surface proteins. The Hemagglutinin protein facilitates viral attachment while Neuraminidase is involved in viral release. These proteins also elicit immune responses that prevent infection or independently reduce

viral replication. The genetic make-up of this swine flu virus is unlike any other: it is an H1N1 strain that combines a triple assortment first identified in 1998 including human, swine, and avian influenza with two new pig H3N2 virus genes from Eurasia, themselves of recent human origin. The distinct antigenic properties of the new swine virus compared with seasonal influenza A (H1N1) virus suggest that human immunity against new swine influenza virus is limited, although the age distribution of reported cases suggests some degree of protection in older age groups.

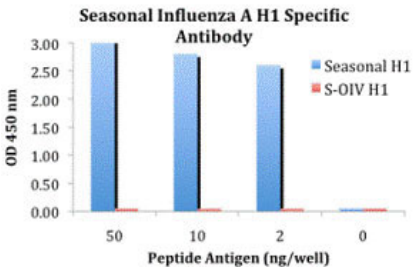
References

Thompson WW, Shay DK, Weintraub, et al. Mortality associated with influenza and respiratory syncytial virus in the United States. JAMA 2003; 289:179-186.
Novel Swine-Origin Influenza A (H1N1) Virus Investigation Team, Dawood FS, Jain S, et al. Emergence of a novel swine-origin influenza A (H1N1) virus in humans. N. Engl. J. Med. 2009; 360:2605-15.
Butler D. Swine flu goes global. Nature 2009; 458:1082-3.
Morens DM, Taubenberger JK, and Fauci AS. The Persistent Legacy of the 1918 Influenza Virus. N. Engl. J. Med. 2009; Jun 29.

Images



Western blot analysis of Hemaggutinin using recombinant seasonal Hemagglutinin (lanes A & B) and swine-origin Hemagglutinin (lanes C & D) with anti-seasonal Hemagglutinin antibody (APS10930) at 2 µg/mL (lanes A & C) and anti-swine-origin Hemagglutinin antibody (5237) at 2 µg/mL (lanes B & D).



ELISA results using Seasonal H1N1 Hemagglutinin antibody at 1 µg/mL and the blocking and corresponding peptides at 50, 10, 2 and 0 ng/mL.