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www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 500-301-975

H5N1 Antibody VN04-2

Overview

Description:	Anti-H5 Hemagglutinin of A/Vietnam/1203/04 Influenza Virus (VN04-2) Ascites (MOUSE) Monoclonal Antibody - 500-301-975
Item No.:	500-301-975
Size:	100 µL
Reactivity:	Virus
Host Species:	Mouse

Product Details

Background:	Antibody raised against the hemagglutinin (HA) surface glycoprotein of the A/Vietnam/1203/04 (H5N1) influenza virus. Generally referred to as ''bird flu'', the H5N1 influenza A virus has been documented in poultry and humans across ten Eurasian countries, from Japan in the north to Indonesia in the south. Without immunity, humans would have no protection against H5N1 influenza viruses, which could potentially cause a catastrophic pandemic influenza. This antibody, directed against the HA surface glycoprotein of the A/Vietnam/1203/04 (H5N1) influenza virus, is intended to further our understanding of the mechanisms underlying antigenic variation and evolution of novel variants. The major functions of HA include receptor-binding and fusion activities, but there may also be a structural role for HA in viral particle formation. Following attachment of HA to surface receptors on susceptible cells, the influenza virus enters the cell via endocytosis and membrane fusion.
Synonyms:	mouse anti-H5N1 antibody, mouse anti-Hemagglutinin A antibody, H5HA antibody, Hemagglutinin 5 antibody, H5N1 antibody
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	15A3
Format:	ASCITES

Target Details

Gene Name:	HA
Reactivity:	Virus

Immunogen Type:	Native Protein
Immunogen:	This monoclonal antibody was produced by intraperitoneal immunization of BALB/c mice with concentrated purified virus preparation containing hemagglutinin (HA) protein of influenza A virus [strain A/Vietnam/1203/04 (H5N1)] using the modification of the method described by Kohler and Milstein. Each mouse received two immunizations of 15 µg HA with incomplete Freund's adjuvant, administered 3 week apart.
Purity/Specificity:	This product was clarified from mouse ascitic fluid and is specific for H5 hemagglutinin (HA) protein of influenza A virus [strain A/Vietnam/1203/04 (H5N1)]. VN04-2 monoclonal antibody did not cross-react with influenza viruses of other HA subtypes. This monoclonal antibody reacted with H5N1 influenza virus representatives of different clades and subclades of the H5 HA subtype.
Relevant Links:	• NCBI - 159144921 • UniProtKB - A8UDQ2

Application Details

Application Note:	This monoclonal antibody can be used for hemagglutination inhibition (HI) assays to provide antigenic characterization of the influenza A viruses of the H5 HA subtype. This monoclonal antibody is suitable for virus neutralization assays (in cell culture and in embryonated chicken eggs), ELISA, immunoprecipitation, immunohistochemistry and western blotting.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5,000
IHC:	User Optimized
IP:	User Optimized
Neutralization:	User Optimized
WB:	User Optimized

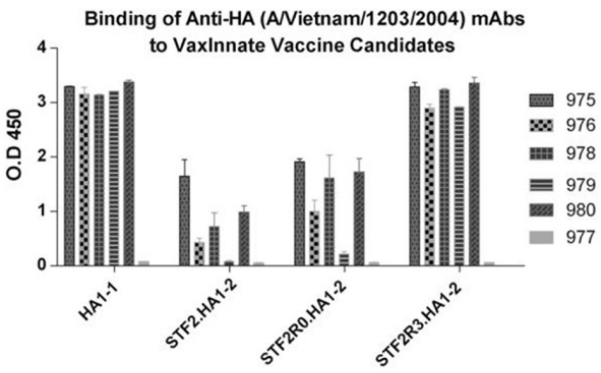
Formulation

Physical State:	Liquid (sterile filtered)
Buffer:	None
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



ELISA
Relative reactivity of monoclonal antibody against various VN04 constructs. ELISA plates were coated with 4 µg/ml of each protein in duplicates overnight, blocked and incubated with a 1:5000 dilution of each of the monoclonal antibodies (p/n 500-301-975 through 500-301-980) for 2 h at room temperature (one antibody per plate), followed by a 30 min incubation of a 1:10,000 dilution of HRP-goat anti-mouse IgG for 30 min and developed with TMB. Mean absorbance with standard deviation for replicate wells are reported. Fig 3. PMID: 19654064

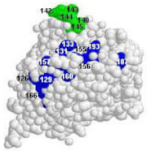


Diagram
Schematic representation of the antigenic sites and the epitopes on the globular head of the HA H5 HA molecule. Images were created with RasMol 2.6, and the HA structure was obtained from the Protein Data Bank (PDB accession number 1JSM). Amino acid positions are designated in H3 numbering. Image provided courtesy of Elena Govorkova Ph D.

Disclaimer

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