Datasheet for 200-301-NH9

H5 HA 2.3.4.4b Antibody (18A4)

Overview

Description:	Anti-Hemagglutinin (HA) (Mouse) Monoclonal Antibody - 200-301-NH9
Item No.:	200-301-NH9
Size:	100 µg
Applications:	ELISA, SDS-PAGE
Host Species:	Mouse Balb/c

Product Details

Background:	Monoclonal antibody raised against recombinant hemagglutinin (HA) from H5N1 clade 2.3.4.4b. Highly pathogenic avian influenza (HPAI) H5N1 viruses of clade 2.3.4.4b have rapidly expanded in the United States since late 2021, driving unprecedented outbreaks in poultry and wild birds. HA-the primary viral surface glycoprotein-is a critical target for neutralizing antibodies, yet its high antigenic variability underscores the need for well□defined research reagents. This monoclonal antibody is part of a targeted panel generated against the recombinant HA ectodomain from H5N1 clade 2.3.4.4b, supporting studies of antigenicity, viral evolution, and immune recognition.
Synonyms:	mouse anti-H5 Antibody, mouse anti-Avian influenza A Antibody, Hemagglutinin antibody, Hemagglutinin 5 antibody, H5N1
Host Species:	Mouse Balb/c
Clonality:	Monoclonal
Clone ID:	18A4.E4.E3
Format:	IgG1

Target Details

Gene Name:	HA
Immunogen Type:	Recombinant Protein
Immunogen:	This protein A purified monoclonal antibody was produced by intraperitoneal immunization of BALB/c mice with concentrated purified virus preparation containing hemagglutinin (HA) protein of influenza A virus [clade 2.3.4.4b].

Purity/Specificity:	This product was purified from tissue culture supernatant fluid by Protein A chromatography and is specific for Avian influenza A (H5N1) clade 2.3.4.4b Hemagglutinin (HA) protein. This antibody reacts with HA5 clade 2.3.4.4b and HA3 H3N2. The product was purified from tissue culture supernatant by chromatography. Reactivity against homologues from other sources is not known.

Application Details

Tested Applications:	ELISA, SDS-PAGE
Application Note:	Anti-Hemagglutinin (HA) antibody has been tested in ELISA, biolayer interferometry (BLI), and HI assays with 1% horse RBC. This antibody may be used for hemagglutination inhibition (HI) assays to provide antigenic characterization of the influenza A viruses of the H5 HA subtype and may be suitable for virus neutralization assays (in cell culture and in embryonated chicken eggs), ELISA, immunoprecipitation, immunohistochemistry and western blotting. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:64,000-1:84,000

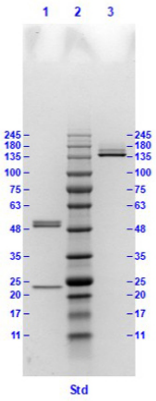
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.019 mg/mL by nanodrop at 205 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

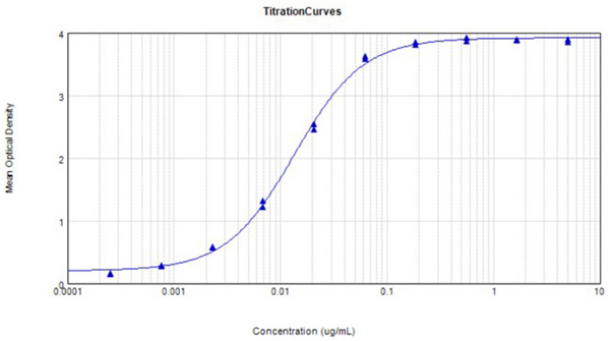
Shipping & Handling

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



SDS-PAGE
Coomassie stained SDS-PAGE results using Anti-Hemagglutinin (HA) (Mouse) Monoclonal Antibody clone 18A4 separated in a 4-20% gradient gel.
Lane 1: Anti-Hemagglutinin (clone 18A4) reduced [1.0µg].
Lane 2: Molecular weight standards.
Lane 3: Anti-Hemagglutinin (clone 18A4) non-reduced [1.0µg].
Results show purity with no signs of degradation or aggregation.



ELISA
ELISA results of Anti-Hemagglutinin (HA) (Mouse) Monoclonal Antibody Clone 18A4. Each well was coated in duplicate with 10µg/mL of influenza A virus H5N1 [clade 2.3.4.4b]. The starting dilution of antibody was 5µg/mL and the X-axis represents the Log10 of a 3-fold dilution. This titration is a 4-parameter curve fit where the IC50 is defined as the titer of the antibody. The antibody titer was 1:74,100. Assay performed using 3% Fish Gel in PBS (p/n MB-066), Rabbit Anti-Mouse IgG HRP conjugated (p/n 610-403-C46), and TMB substrate (p/n TMBE-1000).

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.