

Anti-Influenza A virus nucleoprotein
Mouse monoclonal antibody

Subclass: IgG2a/k

PRODUCT NO.

HYB 156-01

Clone: 5D8

PRESENTATION

Preparation: Protein-A/G purified

Content: Available in 200 µL and 1 mL volumes, 1 mg/mL

Solvent: 0.01 M phosphate buffer, pH 7.4, containing 0.5 M NaCl and 15 mM sodium azide

Storage: In the dark at 4-8°C

ANTIGEN

Influenza viruses are common and highly infectious human pathogens. They are constantly mutating to modify their antigenicity and avoid elimination by immunity to previous generations of virus. The nucleoprotein of influenza A virus is a basic, phosphorylated multimeric protein consisting of 498 aa subunits that encapsidate the viral RNA genome to form a ribonucleoprotein particle (1).

IMMUNOGEN

Unpurified influenza A virus (H1N1 A/PR/8/34) for primary intranasal immunization, boosted intravenously with purified influenza A virus disrupted with Triton X-100 for 45 min at 37°C (2).

SPECIFICITY

HYB 156-01 is specific for influenza A virus nucleoprotein and does not cross-react with influenza B virus (2).

EPI TOPE SPECIFICITY

Not determined

REACTIVITY

A pool of HYB 156-01 and HYB 156-02 is suitable as capture antibody in a sandwich ELISA for influenza A virus, using the same pool of antibodies (biotinylated) for detection (2).
HYB 156-01 reacts with influenza A-infected, acetone-fixed VERO cells in immunofluorescence cytochemistry.

CULTURE MEDIUM

Dulbecco's modified Eagle's medium with 10% fetal calf serum

FUSION PARTNER

X63-Ag8.653

IMMUNIZATION

Female BALB/c mice were immunized intranasally with 50-100 haemagglutination units of unpurified virus and boosted intravenously 2 months later with 10 µg of purified virus.

APPLICATION

Method	Usability	Dilution guideline	References
ELISA	Yes	1/40,000	2
Immunoblotting	No		2
Immunohistochemistry	Yes	1/1500	

The dilution guideline for ELISA is based on use as detection antibody for antigen coated at 1 µg/ml. Users should determine the optimal dilutions for their own purposes.

REFERENCES

- Portela A, Digard P (2002) The influenza virus nucleoprotein: a multifunctional RNA-binding protein pivotal to virus replication. *J Gen Virol* 83:723-734.
- Glikmann G, Mordhorst CH, Koch C (1995) Monoclonal antibodies for the direct detection of influenza-A virus by ELISA in clinical specimens from patients with respiratory infections. *Clin Diagn Virol* 3:361-369.

CONDITIONS

All products are supplied on the understanding that they are for in vitro use only. The information and product are offered without guarantee as the ultimate conditions of use are beyond our control. The animals from which this product was derived have not been exposed to or inoculated with any livestock or poultry disease agents exotic to the United States or Western Europe, and did not originate from facilities where work with exotic disease agents affecting livestock or avian species is carried out.