

## PRODUCT SPECIFICATION

### Anti-Influenza A virus matrix protein

#### Mouse monoclonal antibody, biotinylated HYB 156-02 B

Subclass: IgG1/k

PRODUCT NO.

PRESENTATION

Preparation: Biotinylated  
 Content: 100 µL, 1 mg/mL  
 Solvent: 0.01 M phosphate buffer, pH 7.4, with 0.14 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 matrix protein of influenza virus is a multimer of 25-30 kDa subunits that mediates the encapsidation of the RNA-nucleoprotein cores into the membrane envelope (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 156-02 is specific for influenza A virus matrix protein as determined by Western blotting (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 156-02 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			
Immunohistochemistry			

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

- Sha B, Luo M (1997) Structure of a bifunctional membrane-RNA binding protein, influenza virus matrix protein M1. *Nat Struct Biol* 4:239-244.
- 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.