

PRODUCT SPECIFICATION

Anti-Influenza B virus nucleoprotein

Mouse monoclonal antibody, biotinylated HYB 116-03 B

Subclass: IgG2a/k

PRODUCT NO.

PRESENTATION

Preparation: Biotinylated

Content: 100 µL, 1 mg/mL +/- 15%. See Certificate of Analysis for details.

Solvent: 0.01 M phosphate buffer, pH 7.4, with 0.14 M NaCl and 15 mM sodium azide

Storage: 4-8°C without exposure to light. No precautions necessary during handling.

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 B virus is a basic, phosphorylated multimeric protein consisting of 560 aa subunits that encapsidate the viral RNA genome to form a ribonucleoprotein particle (1).

IMMUNOGEN

Unpurified influenza B virus (B/Lee/40) for primary intranasal immunization, boosted intravenously with purified influenza B virus disrupted with Triton X-100 for 40 min at 37°C (2).

SPECIFICITY

HYB 116-03 reacts with influenza B virus nucleoprotein as demonstrated by immunoblotting after SDS-PAGE. HYB 116-03 does not cross-react with influenza A virus (2).

EPI TOPE SPECIFICITY

Epitope differs from HYB 116-01 and HYB 116-02 as determined by inhibition ELISA.

REACTIVITY

Biotinylated HYB 116-03 is suitable as detecting antibody in combination with HYB 116-02 or HYB 116-01 + -02 as capture antibody in sandwich ELISA for influenza B virus (2).

HYB 116-03 reacts with influenza B infected, acetone-fixed Vero in immunofluorescence cytochemistry. In Western blotting a dilution guideline of 1/40 has proved successful (2).

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	References
ELISA	Yes	2
Immunoblotting	Not determined	
Immunohistochemistry	Not determined	

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, Chen S-N, Mordhorst CH, Koch C (1995) Monoclonal antibodies for the rapid diagnosis of influenza-B virus infections by ELISA: production and characterization. *Clin Diagn Virol* 4:27-42.

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.