

**Anti-Influenza B virus nucleoprotein  
Mouse monoclonal antibody**

Subclass: IgG2a/k

**PRODUCT NO. HYB 116-01**

**PRESENTATION** Preparation: Protein-A 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 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 116-01 reacts with influenza B virus nucleoprotein as demonstrated by immunoblotting after SDS-PAGE. HYB 116-01 does not cross-react with influenza A virus (2).

**EPITOPE SPECIFICITY** Epitope differs from that of HYB 116-03

**REACTIVITY** HYB 116-01 in combination with HYB 116-02 is suitable as capture antibody, with biotinylated HYB 116-03 as detecting antibody in sandwich ELISA for influenza B virus (2).  
 HYB 116-01 reacts with influenza B-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.

Method	Usability	Dilution guideline	References
ELISA	Yes	1/200	2
Immunoblotting	No		2
Immunohistochemistry	Yes	1/1000	

The dilution guideline for ELISA is based on use as capture antibody. The antibody should be coated onto microwells at a minimum protein concentration of 5 µg/mL.

**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.