

## PRODUCT SPECIFICATION

### Anti-Propertdin (human)

#### mouse monoclonal antibody, biotinylated

Subclass: IgG<sub>1</sub>/k
**PRODUCT NO.**
**HYB 039-04 B**
**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**

Propertdin in plasma is a mixture of cyclic dimers, trimers and tetramers. The molecular weight of the glycosylated monomer is 53 kDa (3). Propertdin is a regulator protein of the alternative complement pathway. It stabilizes the C3 convertase exerting its effect by binding to C3b in the C3bBb complex and thereby inhibiting cleavage of C3b by factor I and increasing the affinity for factor B. Serum concentration is approximately 25 µg/mL (2,3).

**IMMUNOGEN**

Propertdin isolated from human plasma adsorbed onto aluminum hydroxide gel (1)

**SPECIFICITY**

HYB 039-04 is specific for human propertdin

**EPITOPE SPECIFICITY**

Epitope specificity differs from that of HYB 039-06 but slightly overlap as determined by inhibition ELISA.

**REACTIVITY**

HYB 039-04 reacts strongly with propertdin isolated from human plasma when tested in sandwich ELISA using HYB 039-04 as capture and biotinylated detection antibody, only very low reaction is seen with plasma from patients deficient in propertdin. HYB 039-04 works equally well in ELISA with purified propertdin coated directly onto the microtiter well. In Western blotting after SDS-PAGE HYB 039-04 reacts with propertdin in both reduced (subunits of 25 kDa and 56 kDa) as well as unreduced forms (220 kDa).

**CULTURE MEDIUM**

RPMI 1640 with 10% fetal calf serum

**FUSION PARTNER**

X63-Ag8.653

**IMMUNIZATION**

Female CF1 x BALB/c mice immunized by intraperitoneal injection

**APPLICATION**

Method	Usability	Dilution guideline	References
ELISA	Yes	1/4000	
Immunoblotting			
Immunohistochemistry			

The dilution guideline for ELISA is based on use as detection antibody for propertdin coated at 0.2 µg/ml. Users should determine the optimal dilutions for their own purposes.

**REFERENCES**

1. Gotze O, Medicus RG, Muller-Eberhard HJ (1977) Alternative pathway of complement: nonenzymatic, reversible transition of precursor to active propertdin. J Immunol 118:525-532.
2. Nielsen HE, Koch C (1987) Congenital propertdin deficiency and meningococcal infection. Clin Immunol Immunopathol 44:134-139.
3. Fijen CA, Bogaard R, Schipper M, Mannens M, Schlesinger M, Nordin FG, Dankert J, Daha MR, Sjöholm AG, Truedsson L, Kuijper EJ (1999) Propertdin deficiency: molecular basis and disease association. Mol Immunol 36:863-867.
4. Bathum L, Hansen H, Teisner B, Koch C, Garred P, Rasmussen K, Wang P (2005) Association between combined propertdin and mannose-binding lectin deficiency and infection with *Neisseria meningitidis*. Mol Immunol 43:473-479

**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.