

PRODUCT SPECIFICATION

STATENS
SERUM
INSTITUT



HYB 352-01 Anti Filamentous Hemagglutinin (FHA)

Mouse monoclonal antibody

Article No.	69602 (0.2 mL), 101055 1.0 mL		
Product Name	HYB 352-01 Anti Filamentous Hemagglutinin (FHA)		
Clone	12.2B11		
Subclass	IgG1 / kappa		
Description	Preparation:	Protein-A purified	
	Concentration:	1 mg/mL ± 10%, based on A ₂₈₀ . See Certificate of Analysis for details.	
	Solvent:	PBS, pH 7.2 – 7.4	
	Storage:	-18 °C or colder	
Antigen	<p>Filamentous hemagglutinin (FHA) of <i>Bordetella pertussis</i> is a 220 kDa large adhesive surface protein which together with the pertussis toxin (PTx) facilitates attachment of the bacteria to human ciliated cells and macrophages during the course of whooping cough (1).</p> <p>FHA can recognize and bind the leukocyte-restricted adhesion molecule (CD11b/CD18, Mac-1) suggesting that FHA mimics a natural ligand on endothelial cells for this integrin which enables FHA to competitively interfere with CD18-dependent leukocyte migration to the central nervous system (2). Anti FHA antibodies have been shown to be able to permeabilize the blood-brain barrier (1).</p>		
Immunogen	Whole cell pertussis vaccine + FHA.		
Specificity	The antibody is specific for FHA from <i>Bordetella pertussis</i> .		
Epitope Specificity	In a competitive ELISA HYB 352-01 (3) is inhibited by the other monoclonal antibody developed in this series (HYB 352-02) and they are therefore not suited for use in a catching ELISA.		
Reactivity	HYB 352-01 (Mab clone 12.2B11) reacts with determinants in the intermediate and C-terminal end of FHA (4,6) also known as carbohydrate recognition domain C (5). Cross-reactivity to cerebral microvessels has been reported (1).		
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 i.p. with immunogen.		
Application	Method	Usability	References
	ELISA	yes	4
	Immunoblotting	yes	1, 2, 4, 6
	Immunofluorescence	nd.	
	Immunohistochemistry	yes	1

See next page

HYB 352-01 Anti FHA (Filamentous hemagglutinin)

Mouse monoclonal antibody

STATENS
SERUM
INSTITUT



References

- 1) **Tuomanen, E.I., Prasad, S.M., Georg, J.S., Hoepelman, A.I.M., et al.** (1993). Proc. Natl. Acad. Sci. USA. 90, 7824-7828.
- 2) **Starzyk, R.M., Rosenow, C., Frye, J., Leismann, M. et al.** (2000). J Infect Dis. 181, 181-187.
- 3) HYB 352-01 is known from the literature as "12.2B11".
- 4) **Delisse-Gathoye, A., Locht, C., Jacob, F., Raaschou-Nielsen, M. et al.** (1990). Infect Immun 58, 2895-2905.
- 5) **Prasad, S.M., Yin, Y., Rodzinski, E., Tuomanen, E.I., and Masure, H.R.** (1993). Infect Immun 61, 2780 – 2785.
- 6) **Leininger E1, Bowen S, Renaud-Mongénie G, Rouse JH, Menozzi FD, Locht C, Heron I, Brennan MJ.** Immunodominant domains present on the Bordetella pertussis vaccine component filamentous hemagglutinin. J Infect Dis. 1997 Jun;175(6):1423-31.

Conditions

For research use only. Not for use in diagnostic procedures. Not for therapeutic use or applications.

The information and product are offered without guarantee as the ultimate conditions of use are beyond our control. The foregoing is in lieu of all warranties, expressed or implied, including implied warranties of merchantability and fitness for a particular purpose. In no event shall Statens Serum Institut be responsible for loss of profits or indirect consequential losses resulting from use of its products. 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.