

PRODUCT SPECIFICATION

STATENS
SERUM
INSTITUT



HYB 333-03 Anti Pertussis Toxin

Mouse monoclonal antibody

Article No.	63947 (0.2 mL), 100632 (1.0 mL)																	
Product Name	HYB 333-03 Anti Pertussis Toxin																	
Clone	63.1.G9																	
Subclass	IgG1 / kappa																	
Description	Preparation:	Protein-A purified																
	Concentration:	1 mg/mL \pm 10%, based on A ₂₈₀ . See Certificate of Analysis for details.																
	Solvent:	PBS, pH 7.2 – 7.4																
	Storage:	-18 °C or colder																
Antigen	Pertussis toxin (islet-activating protein) is the major protein toxin produced by virulent strains of <i>Bordetella pertussis</i> , the organism that causes whooping cough (1). As revealed by polyacrylamide gel electrophoresis, the purified protein consists of five dissimilar subunits: S1 (MW 28,000), S2 (MW 23,000), S3 (MW 22,000), S4 (MW 11,700) and S5 (MW 9,300), in a molar ratio of 1:1:1:2:1. The A-protomer, S1 is responsible for the enzymatic activity of the toxin. Together, S2, S3, S4 and S5 comprise the B-oligomer, responsible for binding the toxin to the cell surface (2).																	
Immunogen	Pertussis toxin.																	
Specificity	HYB 333-03 (3) reacts with pertussis toxin.																	
Epitope Specificity	HYB 333-03 has a different epitope specificity compared with HYB 333-01, HYB 333-02, HYB 333-05, HYB 333-06 and HYB 333-09.																	
Reactivity	HYB 333-03 (MAb clone 63.1 G9) (3) is well suited for ELISA based measurement of pertussis toxin. HYB 333-03 can neutralize pertussis toxin when measured by Chinese Hamster Ovary cell assays and Leucocytosis promoting activity (4).																	
Culture Medium	Dulbecco's modified Eagle's medium with 10% fetal calf serum.																	
Fusion Partner	X63-Ag8.653.																	
Immunization	Female CF1xBalb/c F1 hybrid mice were immunized i.p. with immunogen.																	
Application	<table><thead><tr><th>Method</th><th>Usability</th><th>References</th></tr></thead><tbody><tr><td>ELISA</td><td>yes</td><td>4</td></tr><tr><td>Immunoblotting</td><td>yes</td><td></td></tr><tr><td>Immunofluorescence</td><td>nd.</td><td></td></tr><tr><td>Neutralization</td><td>yes</td><td>4</td></tr></tbody></table>	Method	Usability	References	ELISA	yes	4	Immunoblotting	yes		Immunofluorescence	nd.		Neutralization	yes	4		
Method	Usability	References																
ELISA	yes	4																
Immunoblotting	yes																	
Immunofluorescence	nd.																	
Neutralization	yes	4																
References	1) Pittman, M. (1979) Rev. Infect. Dis. 1, 401-412. 2) Tamura, M., Nogomori, K., Murai, S., Yajima, M., Ito, K., Katada, T., Ui, M. and Ishi, S. (1982) Biochem. 21, 5516-5522. 3) HYB 333-03 is known from the literature as "63.1 G9" 4) Ibsen, P.H. (1996). The effect of formaldehyde, hydrogen peroxide and genetic detoxification of pertussis toxin on epitope recognition by murine monoclonal antibodies. Vaccine, 14, 359-368.																	

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.