

**Anti-Diphtheria toxoid
Mouse monoclonal antibody**

Subclass: IgG1/k

PRODUCT NO.	HYB 123-09																
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	<i>Corynebacterium diphtheriae</i> is a Gram-positive, non-motile bacterium that can cause serious illness in unvaccinated humans. <i>C. diphtheriae</i> infects the epithelial cells of the upper respiratory tract from where they secrete a potent toxin that is absorbed and disseminated through lymph channels and blood to the susceptible tissues of the body. The toxin is a single protein chain of 62 kDa which is "nicked" at proteolytic processing sites to produce an A chain of 21 kDa and a B chain of 40 kDa, held together by a disulfide bridge. The A-chain carries the ADP-ribosylation enzymatic activity responsible for the toxic action (1).																
IMMUNOGEN	Diphtheria toxoid prepared from toxin purified from <i>C. diphtheriae</i> subsp. <i>intermedius</i> Park-Williams no. 8 by formaldehyde inactivation (2), and adsorbed to aluminum hydroxide gel																
SPECIFICITY	HYB 123-09 reacts with diphtheria toxoid.																
EPI TOPE SPECIFICITY	Not determined																
REACTIVITY	HYB 123-09 reacts in ELISA wells coated with diphtheria toxoid. When used in Western blotting HYB 123-09 detects a band at approximately 63 kDa corresponding to the toxin proenzyme. An antibody pair consisting of HYB 123-09 and HYB 123-05 can be used in a sandwich ELISA when using HYB 123-09 as a coat and biotinylated HYB 123-05 a detection antibody.																
CULTURE MEDIUM	RPMI 1640 with 10% fetal calf serum																
FUSION PARTNER	X63-Ag8.653																
IMMUNIZATION	Female CF1xBalb/c F1 hybrid mice immunized by intraperitoneal injection																
APPLICATION	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Method</th> <th style="width: 20%;">Usability</th> <th style="width: 30%;">Dilution guideline</th> <th style="width: 20%;">References</th> </tr> </thead> <tbody> <tr> <td>ELISA</td> <td style="text-align: center;">Yes</td> <td style="text-align: center;">1/8000</td> <td></td> </tr> <tr> <td>Immunoblotting</td> <td style="text-align: center;">Yes</td> <td></td> <td></td> </tr> <tr> <td>Immunohistochemistry</td> <td style="text-align: center;">Not determined</td> <td></td> <td></td> </tr> </tbody> </table>	Method	Usability	Dilution guideline	References	ELISA	Yes	1/8000		Immunoblotting	Yes			Immunohistochemistry	Not determined		
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REFERENCES	<p>The dilution guideline for ELISA is based on use as detection antibody for antigen coated at 2 µg/ml. Users should determine the optimal dilutions for their own purposes.</p> <ol style="list-style-type: none"> Pappenheimer AM Jr (1977) Diphtheria toxin. <i>Ann Rev Biochem</i> 46:69-94. World Health Organization (1977) Manual for the production and control of vaccines. Diphtheria toxoid. BLG/UNDP/77.1. World Health Organization, Geneva. 																

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.