



CELL LAB Mouse (C3H/HeJ) Anti-Mouse H-2Db

Cat. No.	Form	Quantity
732494	Purified (UNLB) Antibody	0.5 mg
732495	Fluorescein (FITC) Conjugate	0.5 mg
732496	Biotin (BIOT) Conjugate	0.5 mg
732497	Phycoerythrin (PE) Conjugate	0.1 mg

For Laboratory Use Only

DESCRIPTION

Clone: 28-14-8
Isotype: Mouse IgG2a κ
Immunogen: C3H.SW mouse splenocytes^{1,2}
Specificity: An epitope in the α 3 domain of H-2D^b

The "classical" MHC Class I molecules are histocompatibility antigens encoded by the H-2 gene complex and consist of heterodimers of highly polymorphic α chains non-covalently associated with the invariant β 2-microglobulin.^{3,4} These antigens are expressed on most nucleated cells but expression varies on different cell types. MHC Class I molecules present endogenously synthesized peptides to CD8⁺ T lymphocytes, which are usually cytotoxic T cells.⁵ MHC Class I antigens expressed on thymic epithelial cells regulate the positive and negative selection of CD8⁺ T cells during T cell ontogeny.^{3,6} Monoclonal antibody (MAb) 28-14-8 binds to the α 3 domain of H-2D^b in the presence or absence of β 2 microglobulin.^{7,8} It cross-reacts with the α 3 domain of H-2L^d, but not K^d or D^d, and with H-2D^q and/or L^q. The antibody has been shown to block H-2L^d-specific and H-2L^d-restricted antigen-specific lysis of target cells by cytotoxic T lymphocytes,⁹⁻¹¹ but it does not block recognition of H-2L^d-positive target cells by Ly-6G2-positive NK cells.¹²

APPLICATIONS

- Flow cytometry
- Immunohistochemistry (acetone-fixed, frozen tissue sections)
- Complement-mediated cytotoxicity

CHARACTERIZATION

To ensure lot-to-lot consistency, each batch of product is tested to conform with characteristics of a standard reference reagent using flow cytometry.

WORKING DILUTIONS

Flow Cytometry:

Purified antibody	$\leq 1 \mu\text{g}/10^6$ cells
FITC conjugate	$\leq 1 \mu\text{g}/10^6$ cells
BIOT conjugate	$\leq 1 \mu\text{g}/10^6$ cells
PE conjugate	$\leq 0.5 \mu\text{g}/10^6$ cells

Other Applications: Since applications vary, determine the optimum working dilution of the product that is appropriate for your specific needs.

HANDLING AND STORAGE

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of 100 mM borate buffered saline, pH 8.0. No preservatives or amine-containing buffer salts added.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃.

- The phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent.
- Protect fluorochrome-conjugated forms from light. Do not freeze.
- Reagent is stable until the expiration date on the vial when stored at 2-8°C.

STATEMENT OF WARNINGS

1. Specimens, samples and all material coming in contact with them should be handled as if capable of transmitting infection and disposed of with proper precautions.
2. Never pipet by mouth and avoid contact of samples with skin and mucous membranes.
3. Do not use reagent beyond the expiration date on the vial label.
4. Minimize exposure of reagent to light during storage or incubation.
5. Avoid microbial contamination of reagent or erroneous results may occur.
6. Use Good Laboratory Practice (GLP) when handling this reagent.
7. Harmful if swallowed.
8. After contact with skin, wash immediately with plenty of water.
9. Contains sodium azide. Sodium azide under acidic conditions yields hydrazoic acid, an extremely toxic compound. Azide compounds should be flushed with running water while being discarded. These precautions are recommended to avoid deposits in metal piping in which explosive conditions can develop. If skin or eye contact occurs, immediately wash excessively with water.

TRADEMARKS

The Beckman Coulter logo is a trademark of Beckman Coulter, Inc.

For additional information or if damaged product is received, contact your local Beckman Coulter Representative.

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