CELL LAB Rat Anti-Mouse CD8α/Lyt-2

Cat. No.	Form	Quantity
732021	Purified (UNLB) Antibody	0.5 mg
732022	Fluorescein (FITC) Conjugate	0.5 mg
732023	Fluorescein (FITC) Conjugate	0.1 mg
732024	Biotin (BIOT) Conjugate	0.5 mg
732025	Phycoerythrin (PE) Conjugate	0.1 mg
733264	Phycoerythrin (PE) Conjugate	0.2 mg
732026	Allophycocyanin (APC) Conjugate	0.1 mg
732027	Spectral Red™(SPRD) Conjugate	0.1 mg
732029	Cyanine 5 (Cy™5) Conjugate	0.1 mg
733265	Phycoerythrin-Cyanine 5.5 (PE-Cy™5.5) Conjugate	0.1 mg
733266	Phycoerythrin-Cyanine 7 (PE-Cy™7) Conjugate	0.1 mg

For Laboratory Use Only

DESCRIPTION

Clone: 53-6.7
Isotype: Rat (LOU/Ws1/M) IgG2aκ
Specificity: α chain of the murine CD8 heterodimer, Mr 32-34 kDa

In the mouse, CD8 exists in two forms: (1) a CD8 heterodimer composed of an α chain (CD8α/Lyt-2) and a β chain (CD8β/Lyt-3); and (2) a homodimer of two α chains. The heterodimer is found on the surface of essentially all thymocytes and the "suppressor/cytotoxic" subpopulation of mature T lymphocytes.[1] Subsets of intestinal intraepithelial lymphocytes express CD8α without CD8β.[2] It has been suggested that $CD8^+\beta^-$ T cells mature extrathymically, while development of the $CD8\alpha^+\beta^+$ population of T cells is thymus-dependent.[3] CD8 acts as a coreceptor with MHC Class I-restricted T cell receptors in antigen recognition and positive selection of MHC class I-restricted $CD8^+$ T cells.[4] *In vitro* treatment with the 53-6.7 monoclonal antibody (MAb) effectively depletes $CD8\alpha^+$ cells.[5,6] The 53-6.7 MAb also blocks allogeneic help specific for class I MHC antigens and T cell responses to IL-2.[7,8]

APPLICATIONS

- Flow cytometry[8,9]
- Immunohistochemistry (acetone-fixed frozen sections)
- Immunoprecipitation[8]
- *In vitro* depletion of $CD8\alpha^+$ cells[1,4,5]
- Fractionation of $CD8\alpha^+$ T cells

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	≤2 μg/10^6 cells
	FITC and BIOT conjugates	≤2 μg/10^6 cells
	PE conjugate	≤0.2 μg/10^6 cells

APC conjugate	≤0.2 μg/10^6 cells
SPRD conjugate	≤0.2 μg/10^6 cells
Cy5 conjugate	≤0.2 μg/10^6 cells
PE-Cy5.5 conjugate	≤0.2 μg/10^6 cells
PE-Cy7 conjugate	≤0.2 μg/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) conjugates are supplied as 0.5 mg or 0.1 mg in 1.0 mL of PBS/NaN_3.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN_3.
- The phycoerythrin (PE) conjugates are supplied as 0.1 mg in 1.0 mL or 0.2 mg in 2.0 mL of PBS/NaN_3 and a stabilizing agent.
- The allophycocyanin (APC) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN_3 and a stabilizing agent.
- The Spectral Red (SPRD), phycoerythrin–Cyanine 5.5 (PE-Cy5.5), and phycoerythrin-Cyanine 7 (PE-Cy7) conjugates are supplied as 0.1 mg in 1.0 mL of PBS/NaN_3 and a stabilizing agent.
- The Cyanine 5 (Cy5) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN_3.
- 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

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

Spectral Red is a PE/Cy™5 tandem conjugate. Cy5, Cy5.5, and Cy7 are for non-commercial research use only, not for therapeutic or in vivo applications. Other use needs license from Amersham Biosciences Corp., under U.S. Patent Nos. 4,981,977 and 5,268,486 and other patents pending. This material (or portions of this material) is subject to proprietary rights of Amersham Biosciences Corp. and Carnegie Mellon University and made and sold under license from Amersham Biosciences Corp. This product is licensed for sale only for research. It is not licensed for any other use. There is no implied license hereunder for any commercial use. Commercial use shall include: 1) sale, lease, license or other transfer of the material or any material derived or produced from it 2) sale, lease, license or other grant of rights to use this material or any material derived or produced from it 3) use of this material to perform services for a fee for third parties. If you require a commercial license to use this material and do not have one, return this material, unopened to Beckman Coulter, Inc. 11800 SW 147 Ave. Miami, FL 33196, USA and any money paid for the material will be refunded.

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