



CELL LAB Hamster Anti-Mouse CD3 ϵ

Cat. No.	Form	Quantity
731978	Purified (UNLB) Antibody	0.5 mg
731979	Fluorescein (FITC) Conjugate	0.5 mg
731980	Fluorescein (FITC) Conjugate	0.1 mg
731981	Biotin (BIOT) Conjugate	0.5 mg
731982	Phycoerythrin (PE) Conjugate	0.1 mg
733252	Phycoerythrin (PE) Conjugate	0.2 mg
731983	Allophycocyanin (APC) Conjugate	0.1 mg
731984	Spectral Red™ (SPRD) Conjugate	0.1 mg
733253	Cyanine 5 (Cy™5) Conjugate	0.1 mg

For Laboratory Use Only

DESCRIPTION

Clone: 145-2C11
Isotype: Armenian Hamster IgG κ
Immunogen: H-2K^b-specific mouse cytotoxic T lymphocyte clone BM10-37
Specificity: Mouse CD3 ϵ , Mr 25 kDa

CD3 ϵ , a member of the immunoglobulin superfamily of cell surface receptors, is comprised of five invariable chains ranging in size from 16-28 kDa and is closely associated with the T cell antigen receptor (TCR). It is expressed on all T cells of all mouse strains.^{1,2} CD3 plays a major role in signaling during antigen recognition, leading to T-cell activation. Monoclonal antibody (MAb) 145-2C11 recognizes an epitope on the 25 kDa ϵ chain of the CD3/TCR complex. In the presence of Fc receptor-bearing accessory cells, soluble 145-2C11 can activate primed and naïve T cells *in vitro*. The MAb can also induce redirected lysis of specific target cells by Cytotoxic T Lymphocyte (CTL) clones, and it can block lysis of specific target cells by antigen-specific CTL's.²⁻⁴ Immobilized 145-2C11 can activate both normal T lymphocytes and cloned T cell lines. Under certain conditions, T cell activation by 145-2C11 may result in apoptotic cell death.^{5,6}

APPLICATIONS

- Identification and enumeration of CD3⁺ cells by flow cytometry^{1,2}
- Immunoprecipitation¹
- Western blotting
- *In vitro* depletion of CD3⁺ cells²
- *In vitro* activation of T cells²⁻⁴
- Immunohistochemistry

CHARACTERIZATION

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

WORKING DILUTIONS

Flow Cytometry:

FITC conjugate	≤3 μ g/10 ⁶ cells
BIOT conjugate	≤3 μ g/10 ⁶ cells
PE conjugate	≤1 μ g/10 ⁶ cells

APC conjugate	≤1 µg/10 ⁶ cells
SPRD conjugate	≤1 µg/10 ⁶ cells
Cy5 conjugate	≤1 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/NaN₃.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃.
- The phycoerythrin (PE) conjugates are supplied as 0.1 mg in 1.0 mL or 0.2 mg in 2.0 mL of PBS/NaN₃ and a stabilizing agent.
- The allophycocyanin (APC) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent.
- The Spectral Red (SPRD) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent.
- The Cyanine 5 (Cy5) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃.
- 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

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Cy5 is a trademark of GE Healthcare Inc.

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

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