

Product datasheet for **CL001A**

Cd3e Hamster Monoclonal Antibody [Clone ID: 145-2C11]

Product data:

Product Type:	Primary Antibodies
Clone Name:	145-2C11
Applications:	FC, FN, IHC, IP, WB
Recommended Dilution:	This antibody will prove useful in studying the role of various components of the TCR complex in T cell activation and development, and will allow for the development of an animal model in which to investigate the immunoregulatory effects of in vivo administration of anti-CD3 antibodies, an area of obvious clinical importance. Anti-CD3 is ideal for flow cytometry applications, particularly as a specific marker for tracking mouse T cells. In addition, this monoclonal antibody, clone 145-2C11 was specifically designed to trigger T cell activation. This clone has also been reported to work in Immunoprecipitation (1, 2) and Western Blotting (Salvadori S. et al. 1994. J. of Immunol. 153: 5176-5182).
Reactivity:	Mouse
Host:	Hamster
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	H-2K ^b sp
Specificity:	This monoclonal antibody is specific for a 25 kDa protein component (e-T3) of the antigen specific T cell receptor on all mouse strains tested.
Formulation:	PBS (0.2 µm filtered), with no preservative State: Azide Free State: Liquid purified from ascitic fluid
Concentration:	lot specific
Purification:	Protein G Chromatography
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	CD3 antigen, epsilon polypeptide



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Database Link: [Entrez Gene 12501 Mouse P22646](#)

Background: The e-T3 protein has been shown to be non-covalently associated on the cell surface alpha/beta heterodimer of the CD3 associated complex. This monoclonal antibody reacts with all mature T cells and can both activate and inhibit T cell function (1). This fact identifies e-T3 as a cell surface protein involved in the transduction of activation signals. All peripheral T cells express this determinant however B cells and bone marrow cells have proven to be negative. Although the expression of this particular epitope on peripheral T cells is uniformly high, staining of thymocytes reveals distinct subpopulations of cells differing in the level of expression of this marker.

Synonyms: T3/Leu-4

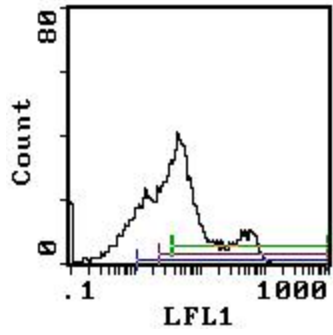
Note: Protocol: **Flow Cytometry analysis**

1. Prepare cell suspension in Media A. For cell preparations, deplete the red blood cell population with cell separation medium.
2. Wash 2 times.
3. Resuspend the cells to a concentration 2×10^7 cells/ml in media A. Add 50 μ l of this suspension to each tube (each tube will then contain 1×10^6 cells, representing one test).
4. To each tube add 0.2 μ g of CL001A per 1×10^6 cells*.
5. Vortex the tubes to ensure thorough mixing of antibody and cells.
6. Incubate the tubes for 30 minutes at 4°C.
7. Wash 2 times at 4°C.
8. Add 100 μ l of secondary antibody (f.e. FITC Goat anti-hamster Ig) at a dilution recommended by the manufacturer.
PLEASE NOTE: Do not use PE Goat a hamster IgG as the secondary antibody.
9. Incubate tubes at 4°C for 30-60 minutes. (It is recommended that the tubes are protected from light since most fluorochromes are light sensitive).
10. Wash 2 times at 4°C in Media B.
11. Resuspend the cell pellet in 50 μ l ice cold Media B.
12. Transfer to suitable tubes for flow cytometric analysis containing 15 μ l of propidium iodide at 0.5 mg/ml in phosphate buffered saline. (This stains dead cells by intercalating DNA).

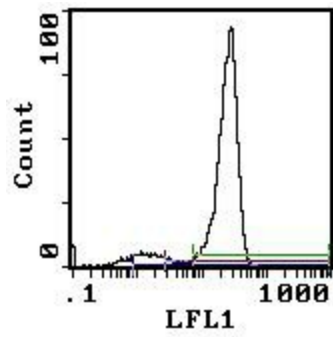
Media: A. Phosphate buffered saline (pH 7.2) + 5% normal serum of host species + sodium azide (100 μ l of 2 M sodium azide in 100 mls).

B. Phosphate buffered saline (pH 7.2) + 0.5% bovine serum albumin + sodium azide (100 μ l of 2 M sodium azide in 100 mls).

Product images:



FLOW CYTOMETRIC ANALYSIS Donor: BALB/c Cell
 Concentration: 1x10e6 cells Antibody
 Concentration: 0.5 ug/106 cells Isotypic Control:
 Purified Hamster IgG Cell Source: A/ Thymocytes,
 B/ Splenic T Cells Percentage of Cells Stained
 Above Control A/ 51.5%



B/ 85.7%