

**TRAP cleavage (CD40 Ligand) Rabbit Monoclonal Antibody
Product Data Sheet**

Catalog # 1845-1

Clone ID: EP462E **Lot #:** Please refer to vial
Quantity: 100 uL
Type: Rabbit Monoclonal IgG
Species Cross-reactivity: + Human + Mouse + Rat
Applications: + WB + IHC + ICC + Flow Cytometry n/d IP
Molecular Wt.: 35 kDa
UniProt ID: P29965

Background: TRAP cleavage (CD40 Ligand), a 35 kDa ligand, is transiently expressed on the surface of T-cells and binds to CD40, which is expressed on the surface of B-cells. This binding event leads to the differentiation, proliferation, and isotype switching of the B-cells. The physiological importance of CD40L has been demonstrated by the fact that expression of defective CD40L protein causes an immunodeficiency state characterized by high IgM and low IgG serum levels, indicating faulty T-cell dependent B-cell activation (1). Abnormalities in the CD40L gene are associated with an X-linked immunodeficiency in humans [hyper-IgM (immunoglobulin M) syndrome]. This disease is characterized by elevated concentrations of serum IgM and decreased amounts of all other isotypes (2). This CD40L is expressed on activated T cells, mostly CD4+ but also some CD8+ as well as basophils/mast cells. Cross-linking of CD40 with immobilized anti-CD40 or cells expressing CD40L induces B cells to proliferate strongly, and addition of IL-4 or IL-13 allows the generation of factor-dependent long-term normal human B cell lines and the secretion of IgE following isotype switching (3).

Specificity: A synthetic peptide corresponding to residues of human CD40L was used as an immunogen.

Storage Conditions: Store at -20 °C. Buffer: 50 mM Tris-Glycine (pH 7.4), 0.15 M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA. Stable for 12 months from date of receipt.

Recommended Dilutions:

WB: 1:5000

FC: 1:40

Please visit www.epitomics.com for recommended protocols

Background References:

1. Singh J, et al. *Protein Sci.* 7(5):1124-35, 1998.
2. Allen RC, et al. *Science* 259(5097):990-3, 1993.
3. Banchereau J, et al. *Annu Rev Immunol.* 12:881-922, 1994

Related Products:

<u>Antigen</u>	<u>Clone</u>	<u>Catalog #</u>
TNF-alpha	polyclonal	1790-1

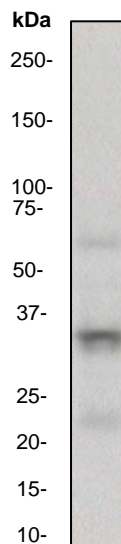


Fig 1. Western blot analysis on MOLT-4 cell lysate using anti-TRAP RabMAb (cat. #1845-1), dilution 1:5000

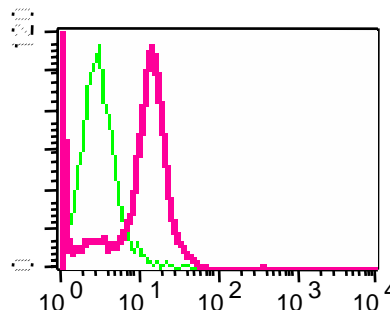


Fig 2. Flow cytometric analysis of permeabilized MOLT-4 cells using anti-TRAP RabMAb (red) (catalog # 1845-1) or a rabbit IgG (negative) (green).

Product QC'd by: _____

For research use only. Not for use in diagnostic or therapeutic applications.

This product was manufactured under U.S. Patent No. 5,675,063. For a complete list of protocols and available related products, please visit us at www.epitomics.com.