

### **TRAP Antibody (N-term)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6545A

### **Specification**

#### TRAP Antibody (N-term) - Product Information

Application WB, FC, IF, IHC-P,E

Primary Accession P29965

Other Accession <u>Q95MQ5</u>, <u>P51749</u>

Reactivity
Predicted
Bovine, Pig
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region
Human
Bovine, Pig
Rabbit
Rabbit
Rabbit
90lyclonal
Rabbit IgG
33-62

# TRAP Antibody (N-term) - Additional Information

#### Gene ID 959

#### **Other Names**

CD40 ligand, CD40-L, T-cell antigen Gp39, TNF-related activation protein, TRAP, Tumor necrosis factor ligand superfamily member 5, CD154, CD40 ligand, membrane form, CD40 ligand, soluble form, CD40LG, CD40L, TNFSF5, TRAP

### Target/Specificity

This TRAP antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 33-62 amino acids from the N-terminal region of human TRAP.

### **Dilution**

WB~~1:1000 FC~~1:10~50 IF~~1:10~50 IHC-P~~1:10~50

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

### **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

TRAP Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.



## TRAP Antibody (N-term) - Protein Information

Name CD40LG

Synonyms CD40L, TNFSF5, TRAP

**Function** Cytokine that acts as a ligand to CD40/TNFRSF5 (PubMed:1280226, PubMed:31331973). Costimulates T-cell proliferation and cytokine production (PubMed:8617933). Its cross-linking on T-cells generates a costimulatory signal which enhances the production of IL4 and IL10 in conjunction with the TCR/CD3 ligation and CD28 costimulation (PubMed:8617933). Induces the activation of NF-kappa-B (PubMed:15067037, PubMed:31331973). Induces the activation of kinases MAPK8 and PAK2 in T-cells (PubMed:15067037). Induces tyrosine phosphorylation of isoform 3 of CD28 (PubMed:15067037). Mediates B-cell proliferation in the absence of co-stimulus as well as IgE production in the presence of IL4 (By similarity). Involved in immunoglobulin class switching (By similarity).

#### **Cellular Location**

Cell membrane; Single-pass type II membrane protein. Cell surface

#### **Tissue Location**

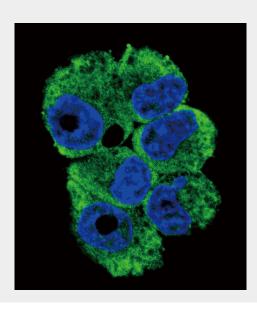
Specifically expressed on activated CD4+ T- lymphocytes

### **TRAP Antibody (N-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

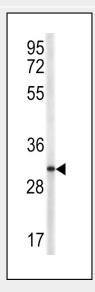
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# TRAP Antibody (N-term) - Images

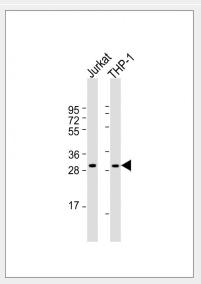




Confocal immunofluorescent analysis of TRAP Antibody (N-term)(Cat#AP6545a) with NCI-H460 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green).DAPI was used to stain the cell nuclear (blue).

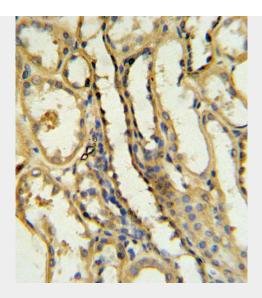


Western blot analysis of TRAP antibody (N-term) (Cat.# AP6545a) in NCI-H460 cell line lysates (35ug/lane). TRAP (arrow) was detected using the purified Pab.

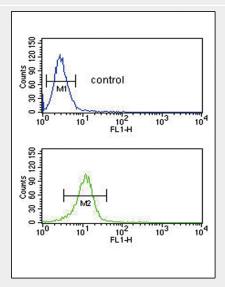


All lanes : Anti-TRAP Antibody (N-term) at 1:1000 dilution Lane 1: Jurkat whole cell lysate Lane 2: THP-1 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 29 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





TRAP Antibody (N-term) (Cat.# AP6545a) IHC analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the TRAP Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



TRAP antibody (N-term) (Cat.# AP6545a) flow cytometric analysis of NCI-H460 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# TRAP Antibody (N-term) - Background

TRAP is expressed on the surface of T cells. It regulates B cell function by engaging CD40 on the B cell surface. A defect in its gene results in an inability to undergo immunoglobulin class switch and is associated with hyper-IgM syndrome.

### TRAP Antibody (N-term) - References

Volmar, C.H., Exp. Cell Res. 315 (13), 2265-2274 (2009) Chai, H., Surgery 146 (1), 5-11 (2009)

**TRAP Antibody (N-term) - Citations** 

• Circular RNA atlas in osteoclast differentiation with and without alendronate treatment



