

# TOB1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8571a

#### **Product Information**

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

Primary Accession P50616

Other Accession

Reactivity

Q8R5K6, Q61471

Human, Mouse

Predicted Rat
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Clone Names RB19906
Calculated MW 38155
Antigen Region 54-83

#### **Additional Information**

**Gene ID** 10140

Other Names Protein Tob1, Transducer of erbB-2 1, TOB1, TOB, TROB1

Target/Specificity This TOB1 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 54-83 amino acids from the N-terminal

region of human TOB1.

**Dilution** WB~~1:1000 IHC-P~~1:100~500 FC~~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 purified through a protein A column, followed by peptide

affinity purification.

**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**TOB1 Antibody (N-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

#### **Protein Information**

Name TOB1

Synonyms TOB, TROB1

**Function** Anti-proliferative protein; the function is mediated by association with

deadenylase subunits of the CCR4-NOT complex (PubMed:<u>23236473</u>, PubMed:<u>8632892</u>). Mediates CPEB3-accelerated mRNA deadenylation by binding to CPEB3 and recruiting CNOT7 which leads to target mRNA

deadenylation and decay (PubMed:21336257).

**Cellular Location** Cytoplasm. Nucleus. Note=Only a small fraction localizes to the cytoplasm

except in late S- phase where more than half of proteins become cytoplasmic

Tissue Location Ubiquitous.

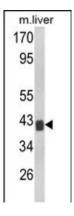
## **Background**

TOB1 is a member of the tob/btg1 family of anti-proliferative proteins that have the potential to regulate cell growth. When exogenously expressed, this protein supresses cell growth in tissue culture. The protein undergoes phophorylation by a serine/threonine kinase, 90 kDa ribosomal S6 kinase. Interactions of this protein with the v-erb-b2 erythroblastic leukemia viral oncogene homolog 2 gene product p185 interferes with growth suppression. This protein inhibits T cell proliferation and transcription of cytokines and cyclins. The protein interacts with both mothers against decapentaplegic Drosophila homolog 2 and 4 to enhance their DNA binding activity. This interaction inhibits interleukin 2 transcription in T cells.

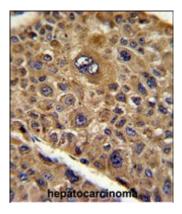
### References

Suzuki,T., et.al., Genes Dev. 16 (11), 1356-1370 (2002) Yoshida,Y., et.al., Cell 103 (7), 1085-1097 (2000)

## **Images**

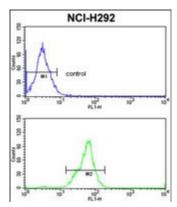


Western blot analysis of TOB1 Antibody (N-term) (Cat. #AP8571a) in mouse liver tissue lysates (35ug/lane). TOB1 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with TOB1 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

TOB1 Antibody (N-term) (Cat. #AP8571a) flow cytometric analysis of NCI-H292 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated



goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.