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# TOB1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8571a

## Product Information

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| **Application** | WB, IHC-P, FC, E |
| **Primary Accession** | P50616 |
| **Other Accession** | Q8R5K6, Q61471 |
| **Reactivity** | Human, Mouse |
| **Predicted** | Rat, Bovine, Canine, Rabbit, Chicken |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB19906 |
| **Calculated MW** | 38155 |
| **Antigen Region** | 54-83 |

## Additional Information

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| **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

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| **Name** | TOB1 |
| **Synonyms** | TOB, TROB1 |

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| **Function** | Anti-proliferative protein; the function is mediated by association with deadenylase subunits of the CCR4-NOT complex (PubMed:23236473, PubMed:8632892). 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. |

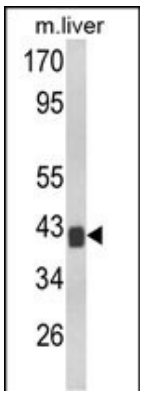
## Background

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.

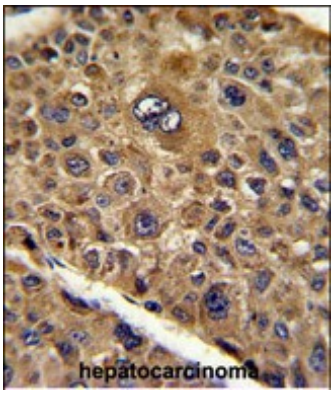
## References

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

## Images

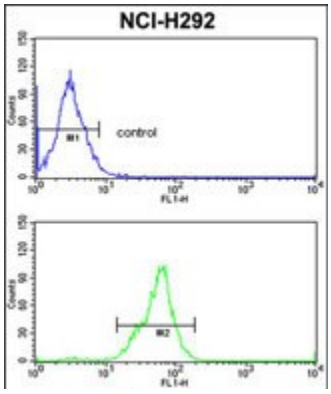



Western blot analysis of TOB1 Antibody (N-term) (Cat. #AP8571a) in mouse liver tissue lysates (35ug/lane). TOB1 (arrow) was detected using the purified Pab.




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'.