

Rabbit anti-Mouse, Rat Tap1 Polyclonal Antibody | anti-Tap1 antibody

Anti-Tap1 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127036	Rabbit	Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

Tap1; Polyclonal Antibody; Anti-Tap1 Antibody Picoband; CREB regulated transcription coactivator 2; CREB-regulated transcription coactivator 2; Transducer of regulated cAMP response element-binding protein 2; TORC-2; Transducer of CREB protein 2; CRTC2; TORC2; anti-Tap1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	MostAbundantly expressed in the thymus. Present in both B and T-lymphocytes.Highly expressed in HEK293T cells and in insulinomas. High levels also in spleen, ovary, muscle and lung, with highest levels in muscle. Lower levels found in brain, colon, heart, kidney, prostate, small intestine and stomach. Weak expression in liver and pancreas.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Applicable Applications for anti-Tap1 antibody	ELISA, FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	E coli-derived mouse Tap1 recombinant protein (Position: E218-D724).
Subcellular Localization	Cytoplasm
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Transcriptional coactivator for CREB1 which activates transcription through both consensus and variant cAMP response element (CRE) sites. Acts as a coactivator, in the SIK/TORC signaling pathway, being active when dephosphorylated and acts independently of CREB1 'Ser-133' phosphorylation. Enhances the interaction of CREB1 with TAF4. Regulates gluconeogenesis as a component of the LKB1/AMPK/TORC2 signaling pathway. Regulates the expression of specific genes such as the steroidogenic gene, StAR. Potent coactivator of PPARGC1A and inducer of mitochondrial biogenesis in muscle cells. Also coactivator for TAX activation of the human T-cell leukemia virus type 1 (HTLV-1) long terminal repeats (LTR).
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



FCM/FACS (Flow Cytometry)
Figure 3. Flow Cytometry analysis of HEPA1-6 cells using anti-Tap1 antibody (AAA127036).Overlay histogram showing HEPA1-6 cells stained with AAA127036 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Tap1 Antibody (AAA127036, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



IF (Immunofluorescence)
Figure 2. IF analysis of Tap1 using anti-Tap1 antibody (AAA127036).Tap1 was detected in an immunocytochemical section of RAW264.7 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL rabbit anti-Tap1 Antibody (AAA127036) overnight at 4 degree C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)
Figure 1. Western blot analysis of Tap1 using anti-Tap1 antibody (AAA127036).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: rat PC-12 whole cell lysates,Lane 2: rat thymus tissue lysates,Lane 3: mouse RAW264.7 whole cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Tap1 antigen affinity purified polyclonal antibody (#AAA127036) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Tap1 at approximately 70 kDa. The expected band size for Tap1 is at 81 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-Tap1 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-Tap1 antibody	Primary Antibodies; Cancer; Co-Activators/Co-Repressors; Energy Metabolism; Energy Transfer Pathways; Epigenetics and Nuclear Signaling; Metabolic Signaling Pathways; Metabolism; Neurology Process; Neuroscience; Nuclear Hormone Receptors; Nuclear Receptor
References	1. Cerundolo, V., Alexander, J., Anderson, K., Lamb, C., Cresswell, P., McMichael, A., Gotch, F., Townsend, A. Presentation of viral antigen controlled by a gene in the major histocompatibility complex. Nature 345: 449-452, 1990.2. Chen, H. L., Gabrilovich, D., Tampe, R., Girgis, K. R., Nadaf, S., Carbone, D. P. A functionally defective allele of TAP1 results in loss of MHC class I antigen presentation in a human lung cancer. Nature Genet. 13: 210-213, 1996.3. Colonna, M., Bresnahan, M., Bahram, S., Strominger, J. L., Spies, T. Allelic variants of the human putative peptide transporter involved in antigen processing. Proc. Nat. Acad. Sci. 89: 3932-3936, 1992.

NCBI AND UNIPROT INFORMATION

NCBI GI #	239835765
NCBI GeneID	21354
NCBI Accession #	NP_038711.2
NCBI GenBank Nucleotide #	NM_013683.2
UniProt Accession #	P21958; Q62427
Molecular Weight	78,864 Da

NCBI Official Full Name	antigen peptide transporter 1 isoform 1
NCBI Official Synonym Full Names	transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)
NCBI Official Symbol	Tap1
NCBI Official Synonym Symbols	Y3; TAP; APT1; Ham1; MTP1; PSF1; ABC17; Abcb2; Ham-1; RING4; Tap-1
NCBI Protein Information	antigen peptide transporter 1; ABC transporter, MHC, 1; peptide supply factor 1; peptide transporter PSF1; peptide transporter TAP1; transporter, ABC, MHC, 1; histocompatibility antigen modifier 1; transporter 1, ABC (ATP binding cassette); ATP-binding ca
UniProt Protein Name	Antigen peptide transporter 1
UniProt Gene Name	Tap1
UniProt Synonym Gene Names	Abcb2; Ham-1; Ham1; APT1
UniProt Entry Name	TAP1_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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