

Rabbit anti-Human PTPN13 Polyclonal Antibody | anti-PTPN13 antibody

Anti-PTPN13 Antibody Picoband

CATALOG # AAA127121	HOST Rabbit	REACTIVITY Human	APPLICATIONS Flow Cytometry, Functional Assay, Western Blot, ELISA
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PRODUCT SYNONYMS

PTPN13; Polyclonal Antibody; Anti-PTPN13 Antibody Picoband; fatty acid binding protein 1; Fatty acid-binding protein; liver; Fatty acid-binding protein 1; Liver-type fatty acid-binding protein; L-FABP; Squalene- and sterol-carrier protein; SCP; Z-protein; p14; Fabp1; anti-PTPN13 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Expressed in lung cancers, including adenocarcinoma, squamous cell carcinoma and small-cell carcinoma. Widely expressed. Expressed in fetal kidney, liver, lung and brain. In adult highest expression in heart and placenta.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-PTPN13 antibody	FCM/FACS (Flow Cytometry), WB (Western Blot), ELISA
Immunogen	E coli-derived human PTPN13 recombinant protein (Position: E1795-D2046).
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	Plays a role in lipoprotein-mediated cholesterol uptake in hepatocytes (By similarity). Binds cholesterol (PubMed:25732850). Binds free fatty acids and their coenzyme A derivatives, bilirubin, and some other small molecules in the cytoplasm. May be involved in intracellular lipid transport (By similarity).
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 2. Flow Cytometry analysis of RT4 cells using anti-PTPN13 antibody (AAA127121). Overlay histogram showing RT4 cells stained with AAA127121 (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-PTPN13 Antibody (AAA127121, 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 (Red line) was also used as a control.



WB (Western Blot)
Figure 1. Western blot analysis of PTPN13 using anti-PTPN13 antibody (AAA127121). 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: human RT4 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-PTPN13 antigen affinity purified polyclonal antibody (#AAA127121) 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 PTPN13 at approximately 270 kDa. The expected band size for PTPN13 is at 270 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-PTPN13 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-PTPN13 antibody	Primary Antibodies; Fatty Acid Oxidation; Fatty Acids; Lipid and Lipoprotein Metabolism; Lipid Metabolism; Metabolic Signaling Pathways; Metabolism; Pathways and Processes; Redox Metabolism; Signal Transduction
References	1. Banville, D., Ahmad, S., Stocco, R., Shen, S.-H. A novel protein-tyrosine phosphatase with homology to both the cytoskeletal proteins of the band 4.1 family and junction-associated guanylate kinases. J. Biol. Chem. 269: 22320-22327, 1994. Note: Erratum: J. Biol. Chem. 270: 10359 only, 1995. 2. Huang, W., Zhu, C., Wang, H., Horvath, E., Eklund, E. A. The interferon consensus sequence-binding protein (ICSBP/IRF8) represses PTPN13 gene transcription in differentiating myeloid cells. J. Biol. Chem. 283: 7921-7935, 2008. 3. Inazawa, J., Ariyama, T., Abe, T., Druck, T., Ohta, M., Huebner, K., Yanagisawa, J., Reed, J. C., Sato, T. PTPN13, a Fas-associated protein tyrosine phosphatase, is located on the long arm of chromosome 4 at band q21.3. Genomics 31: 240-242, 1996.

NCBI AND UNIPROT INFORMATION

NCBI GI #	5453992
NCBI GeneID	5783
NCBI Accession #	NP_006255.1
NCBI GenBank Nucleotide #	NM_006264.2
UniProt Accession #	Q12923; Q15159; Q15263; Q15264; Q15265; Q15674; Q16826; Q8IWH7; Q9NYN9; Q9UDA8; B2RTR0
Molecular Weight	277,508 Da
NCBI Official Full Name	tyrosine-protein phosphatase non-receptor type 13 isoform 2
NCBI Official Synonym Full Names	protein tyrosine phosphatase, non-receptor type 13 (APO-1/CD95 (Fas)-associated phosphatase)
NCBI Official Symbol	PTPN13
NCBI Official Synonym Symbols	PNP1; FAP-1; PTP1E; PTPL1; PTPLE; PTP-BL; hPTP1E; PTP-BAS
NCBI Protein Information	tyrosine-protein phosphatase non-receptor type 13; hPTPE1; protein-tyrosine phosphatase 1E; protein-tyrosine phosphatase PTPL1; fas-associated protein-tyrosine phosphatase 1
UniProt Protein Name	Tyrosine-protein phosphatase non-receptor type 13
UniProt Gene Name	PTPN13
UniProt Synonym Gene Names	PNP1; PTP1E; PTPL1; FAP-1; PTP-E1; hPTPE1

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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Online datasheet: <https://stage.aaabiotech.com/polyclonal/ptpn13-antibody-flow-cytometry-western-blot-elisa/127121>