10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

FAP1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58306

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q12923
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	276906
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human FAP1/PTPN13
Epitope Specificity	801-900/2485
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm, cytoskeleton. Nucleus. Cell projection, lamellipodium.
SIMILARITY	Belongs to the protein-tyrosine phosphatase family. Non-receptor class subfamily.Contains 1 FERM domain.Contains 1 KIND domain.Contains 5 PDZ (DHR) domains.Contains 1 tyrosine-protein phosphatase domain.
SUBUNIT	Interacts with TRIP6 and TNFRSF6 (Fas receptor) through its second PDZ domain. Interacts with the C-terminal SVP motif of NGFR through its third PDZ domain. Interacts with the LIM domain of PDLIM4 through its second and fourth PDZ domains. Binds PLEKHA1 and PLEKHA2 through its first PDZ domain. Interacts with BRD7 and ARHGAP29. Interacts (via PDZ 3 domain) with PKN2 (via C-terminus).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	PTPN13 is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP is a large protein that possesses a PTP domain at C-terminus, and multiple noncatalytic domains, which include a domain with similarity to band 4.1 superfamily of cytoskeletal associated proteins, a region consisting of five PDZ domains, and a leucine zipper motif. This PTP was found to interact with, and dephosphorylate Fas receptor, as well as I-kappa-B-alpha through the PDZ domains, which suggested its role in Fas mediated programmed cell death. This PTP was also shown to interact with GTPase-activating protein, and thus may function as a regulator of Rho signaling pathway.

Additional Information

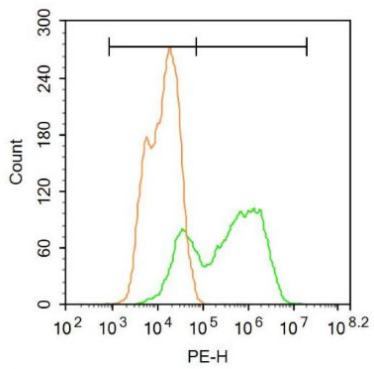
Gene ID	5783

Other Names	Tyrosine-protein phosphatase non-receptor type 13, 3.1.3.48, Fas-associated protein-tyrosine phosphatase 1, FAP-1, PTP-BAS, Protein-tyrosine phosphatase 1E, PTP-E1, hPTPE1, Protein-tyrosine phosphatase PTPL1, PTPN13, PNP1, PTP1E, PTPL1
Target/Specificity	Present in most tissues with the exception of the liver and skeletal muscle. Most abundant in lung, kidney and fetal brain.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=3ug/test,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	PTPN13
Synonyms	PNP1, PTP1E, PTPL1
Function	Tyrosine phosphatase which negatively regulates FAS-induced apoptosis and NGFR-mediated pro-apoptotic signaling (PubMed:15611135). May regulate phosphoinositide 3-kinase (PI3K) signaling through dephosphorylation of PIK3R2 (PubMed:23604317).
Cellular Location	Cytoplasm, cytoskeleton. Nucleus. Cell projection, lamellipodium. Note=Colocalizes with F-actin (PubMed:10826496). Colocalizes with PKN2 in lamellipodia-like structure, regions of large actin turnover (PubMed:11356191)
Tissue Location	Expressed in keratinocytes (at protein level) (PubMed:29043977). Present in most tissues with the exception of the liver and skeletal muscle. Most abundant in lung, kidney and fetal brain.

Images



Blank control:A549.
Primary Antibody (green line): Rabbit Anti-FAP1 antibody (AP58306)
Dilution: 1 µg /10^6 cells;
Isotype Control Antibody (orange line): Rabbit IgG .
Secondary Antibody : Goat anti-rabbit IgG-PE
Dilution: 3 µg /test.
Protocol
The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at-20℃. The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

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