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PTPN13 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP8423a

Specification

PTPN13 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q12923

PTPN13 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 5783

Other Names
Tyrosine-protein phosphatase non-receptor type 13, 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
The synthetic peptide sequence used to generate the antibody AP8423a was selected from the C-term region of human PTPN13. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PTPN13 Antibody (C-term) Blocking Peptide - Protein Information

PTPN13 Antibody (C-term) Blocking Peptide - Background

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 IkappaBalpha 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.

PTPN13 Antibody (C-term) Blocking Peptide - References

Kachel, N., et al., J. Mol. Biol. 334(1):143-155 (2003).Ivanov, V.N., et al., Mol. Cell. Biol. 23(10):3623-3635 (2003).Bompard, G., et al., J. Biol. Chem. 277(49):47861-47869 (2002).Yoshida, S., et al., J. Hum. Genet. 47(11):614-619 (2002).Marin, L., et al., Transplant. Proc. 34(1):280-282 (2002).

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Name PTPN13

Synonyms PNP1, PTP1E, PTPL1

Function
Tyrosine phosphatase which regulates negatively 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.

PTPN13 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides