

Catalog # BP8423a

**PTPN13 Antibody (C-term) Blocking Peptide** Synthetic peptide

# Specification

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

Primary Accession

<u>Q12923</u>

# 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 <a href=/products/AP8423a>AP8423a</a> 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

#### Name PTPN13

Synonyms PNP1, PTP1E, PTPL1

Function

Tyrosine phosphatase which negatively regulates FAS-induced apoptosis and NGFR-mediated pro-apoptotic signaling (PubMed:<a href="http://www.uniprot.org/citations/15611135" target="\_blank">15611135</a>). May regulate phosphoinositide 3-kinase (PI3K) signaling through dephosphorylation of PIK3R2 (PubMed:<a href="http://www.uniprot.org/citations/23604317" target=" blank">23604317</a>).

# **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.

### <u>Blocking Peptides</u>

# PTPN13 Antibody (C-term) Blocking Peptide - Images

# 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).lvanov, 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).