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

PTPN4 Antibody (Center R519) Blocking Peptide

Synthetic peptide
Catalog # BP8543c

Specification

PTPN4 Antibody (Center R519) Blocking Peptide - Product Information

Primary Accession P29074

PTPN4 Antibody (Center R519) Blocking Peptide - Additional Information

Gene ID 5775

Other Names
Tyrosine-protein phosphatase non-receptor type 4, Protein-tyrosine phosphatase MEG1, MEG, PTPase-MEG1, PTPN4

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP8543c was selected from the Center region of human PTPN4. 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.

PTPN4 Antibody (Center R519) Blocking Peptide - Protein Information

Name PTPN4

Function
Phosphatase that plays a role in immunity, learning, synaptic plasticity or cell homeostasis (PubMed:25825441, PubMed:27246854). Regulates neuronal cell homeostasis by protecting neurons against apoptosis (PubMed:20086240). Negatively regulates TLR4-induced interferon beta production by dephosphorylating adapter TICAM2 and inhibiting subsequent TRAM-TRIF interaction (PubMed:25825441). Dephosphorylates also the immunoreceptor tyrosine-based activation motifs/ITAMs of the TCR zeta subunit and thereby negatively regulates TCR-mediated signaling pathway (By similarity). May act at junctions between the membrane and the cytoskeleton.

Cellular Location
Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasm, cytoskeleton
Cytoplasm

PTPN4 Antibody (Center R519) Blocking Peptide - Protocols

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

- Blocking Peptides

PTPN4 Antibody (Center R519) Blocking Peptide - Images

PTPN4 Antibody (Center R519) Blocking Peptide - Background

PTPN4 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 protein contains a C-terminal PTP domain and an N-terminal domain homologous to the band 4.1 superfamily of cytoskeletal-associated proteins. This PTP has been shown to interact with glutamate receptor delta 2 and epsilon subunits, and is thought to play a role in signalling downstream of the glutamate receptors through tyrosine dephosphorylation.

PTPN4 Antibody (Center R519) Blocking Peptide - References

Young,J.A., et.al., Mol. Immunol. 45 (14), 3756-3766 (2008)Stelzl,U., et.al., Cell 122 (6), 957-968 (2005)Hironaka,K., et.al., J. Biol. Chem. 275 (21), 16167-16173 (2000)