

**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](/products/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](http://www.uniprot.org/citations/25825441)), PubMed: [27246854](http://www.uniprot.org/citations/27246854)). Regulates neuronal cell homeostasis by protecting neurons against apoptosis (PubMed: [20086240](http://www.uniprot.org/citations/20086240)). Negatively regulates TLR4-induced interferon beta production by dephosphorylating adapter TICAM2 and inhibiting subsequent TRAM-TRIF interaction (PubMed: [25825441](http://www.uniprot.org/citations/25825441)). Also dephosphorylates 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)