

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