

MEG1 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP8407a**Specification**

MEG1 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [P29074](#)**MEG1 Antibody (Center) 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 [AP8407a](/product/products/AP8407a) was selected from the Center region of human MEG1. 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.

MEG1 Antibody (Center) 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

MEG1 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

MEG1 Antibody (Center) Blocking Peptide - Images**MEG1 Antibody (Center) Blocking Peptide - Background**

MEG1 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.

MEG1 Antibody (Center) Blocking Peptide - References

Hironaka, K., et al., J. Biol. Chem. 275(21):16167-16173 (2000).Gu, M., et al., Proc. Natl. Acad. Sci. U.S.A. 93(23):12980-12985 (1996).Gu, M., et al., J. Biol. Chem. 271(44):27751-27759 (1996).Gu, M.X., et al., Proc. Natl. Acad. Sci. U.S.A. 88(13):5867-5871 (1991).