

SEMA4A Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP16778a**Specification**

SEMA4A Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q9H3S1](#)**SEMA4A Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 64218**Other Names**

Semaphorin-4A, Semaphorin-B, Sema B, SEMA4A, SEMAB, SEMB

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.

SEMA4A Antibody (N-term) Blocking Peptide - Protein Information**Name** SEMA4A**Synonyms** SEMAB, SEMB**Function**

Cell surface receptor for PLXNB1, PLXNB2, PLXNB3 and PLXND1 that plays an important role in cell-cell signaling (By similarity). Regulates glutamatergic and GABAergic synapse development (By similarity). Promotes the development of inhibitory synapses in a PLXNB1-dependent manner and promotes the development of excitatory synapses in a PLXNB2-dependent manner (By similarity). Plays a role in priming antigen-specific T-cells, promotes differentiation of Th1 T- helper cells, and thereby contributes to adaptive immunity (By similarity). Promotes phosphorylation of TIMD2 (By similarity). Inhibits angiogenesis (By similarity). Promotes axon growth cone collapse (By similarity). Inhibits axonal extension by providing local signals to specify territories inaccessible for growing axons (By similarity).

Cellular Location

Cell membrane; Single-pass type I membrane protein

SEMA4A Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

SEMA4A Antibody (N-term) Blocking Peptide - Images

SEMA4A Antibody (N-term) Blocking Peptide - Background

This gene encodes a member of the semaphorin family of soluble and transmembrane proteins. Semaphorins are involved in numerous functions, including axon guidance, morphogenesis, carcinogenesis, and immunomodulation. The encoded protein is a single-pass type I membrane protein containing an immunoglobulin-like C2-type domain, a PSI domain and a sema domain. It inhibits axonal extension by providing local signals to specify territories inaccessible for growing axons. It is an activator of T-cell-mediated immunity and suppresses vascular endothelial growth factor (VEGF)-mediated endothelial cell migration and proliferation in vitro and angiogenesis in vivo. Mutations in this gene are associated with retinal degenerative diseases including retinitis pigmentosa type 35 (RP35) and cone-rod dystrophy type 10 (CORD10). Multiple alternatively spliced transcript variants encoding different isoforms have been identified.

SEMA4A Antibody (N-term) Blocking Peptide - References

Davila, S., et al. Genes Immun. 11(3):232-238(2010) Schmidt-Kastner, R., et al. Mol. Vis. 14, 125-135 (2008) Toyofuku, T., et al. EMBO J. 26(5):1373-1384(2007) Abid, A., et al. J. Med. Genet. 43(4):378-381(2006) Kumanogoh, A., et al. J. Cell. Sci. 116 (PT 17), 3463-3470 (2003) :