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SEMA4A Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP16778a

Specification

SEMA4A Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	O9H3S1
Other Accession	NP_001180230.1, NP_001180229.1
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit Ig**
Calculated MW	**83574**
Antigen Region	**151-180**

SEMA4A Antibody (N-term) - Additional Information

Gene ID 64218

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

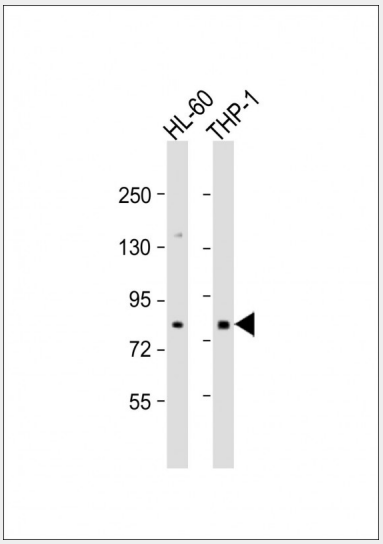
Target/Specificity
This SEMA4A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 151-180 amino acids from the N-terminal region of human SEMA4A.

Dilution
WB~~1:1000

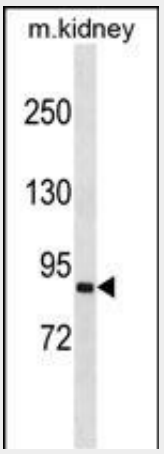
Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
SEMA4A Antibody (N-term) is for research



All lanes : Anti-SEMA4A Antibody (N-term) at 1:500 dilution Lane 1: HL-60 whole cell lysate Lane 2: THP-1 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 84 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



SEMA4A Antibody (N-term) (Cat. #AP16778a) western blot analysis in mouse kidney tissue lysates (35ug/lane).This demonstrates the SEMA4A antibody detected the SEMA4A protein (arrow).

use only and not for use in diagnostic or therapeutic procedures.

SEMA4A Antibody (N-term) - 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) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SEMA4A Antibody (N-term) - 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) - 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) :