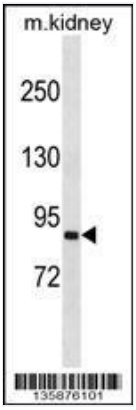
SEMA4A Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	SEMA4A, Polyclonal Antibody
Full Product Name	SEMA4A, NT (SEMA4A, SEMAB, SEMB, Semaphorin-4A, Semaphorin-B) (AP)
Product Gene Name	anti-SEMA4A antibody
Product Synonym Names	SEMA4A; SEMAB; SEMB; Semaphorin-4A; Semaphorin-B
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with Alkaline Phosphatase (AP).
Purity/Purification	Purified by Protein A Affinity Chromatography.
Preparation and Storage	Store product at 4 degree C. DO NOT FREEZE! Stable at 4 degree C for 12 months after receipt as an undiluted liquid. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. For maximum recovery of product, centrifuge the original vial prior to removing the cap.
Molecular Weight	69,104 Da
OMIM	607292
3D Structure	ModBase 3D Structure for Q9H3S1
Immunogen	SEMA4A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 150-180 amino acids from the N-terminal region of human SEMA4A.
Conjugate	AP
Note	Preservative Free
Product Categories/Family for anti-SEMA4A antibody	Antibodies; Plexin; Semaphorin
Applications Tested/Suitable for anti-SEMA4A antibody	Western Blot (WB), ELISA (EIA)
Application Notes for anti-SEMA4A antibody	WB: 1:100-500 ELISA: 1:1,000 Applications are based on unconjugated antibody.
Related Product Information for anti-SEMA4A antibody	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.
Product References and Citations for anti-SEMA4A antibody	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).

Other Notes	Small volumes of anti-SEMA4A antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for SEMA4A purchase	MBS6345998 is an antibody targeting SEMA4A. Also known as SEMA4A, NT (SEMA4A, SEMAB, SEMB, Semaphorin-4A, Semaphorin-B) (AP). Reactive in Human, Mouse. Host: Rabbit.



Western Blot (WB) of anti-SEMA4A antibody
SEMA4A Antibody (N-term) western blot analysis in mouse kidney tissue lysates (35ug/lane).This demonstrates the SEMA4A antibody detected the SEMA4A protein (arrow).

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for SEMA4A. It may not necessarily be applicable to this product.

NCBI GI #	300863074
NCBI GeneID	64218
NCBI Accession #	NP_001180230.1
NCBI Related Accession #	NP_001180229.1
UniProt Primary Accession #	Q9H3S1
UniProt Secondary Accession #	Q5TCI5; Q5TCJ6; Q8WUA9; B2RDH8; B3KR76
UniProt Related Accession #	Q9H3S1
GenBank Nucleotide #	NM_001193301.1
NCBI Official Full Name	semaphorin-4A isoform 1
NCBI Official Synonym Full Names	semaphorin 4A
NCBI Official Symbol	SEMA4A
NCBI Official Synonym Symbols	RP35; SEMB; SEMAB; CORD10
UniProt Protein Name	Semaphorin-4A
UniProt Synonym Protein Names	Semaphorin-B
Protein Family	Semaphorin
UniProt Gene Name	SEMA4A
UniProt Synonym Gene Names	SEMAB; SEMB; Sema B
UniProt Entry Name	SEM4A_HUMAN
NCBI Protein Information	semaphorin-4A

UniProt Comments for SEMA4A	SEMA4A: a single-pass type I membrane protein that inhibits axonal extension by providing local signals to specify territories inaccessible for growing axons. Defects in SEMA4A are the cause of retinitis pigmentosa type 35 and cone-rod dystrophy type 10. Protein type: Membrane protein, integral Chromosomal Location of Human Ortholog: 1q22 Cellular Component: integral to membrane; plasma membrane Molecular Function: protein binding; receptor activity Biological Process: regulation of cell shape; axon guidance; negative regulation of angiogenesis; T-helper 1 cell differentiation; angiogenesis Disease: Retinitis Pigmentosa 35; Cone-rod Dystrophy 10
Research Articles on SEMA4A	**1.** Advanced peri-implantitis lesions showed higher levels of gene expression for Sem3A and Sem4D and lower levels of Sem4A in comparison to tissues obtained from a healthy dental implant.
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