

Product datasheet for **AP20459PU-M**

SEMA4A Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	Western blot: 1/500-1/1000. Immunofluorescence: 1/50-1/200. Immunohistochemistry on Paraffin Sections: 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of SEMA4A protein. (region surrounding asn532)
Formulation:	PBS, pH~7.2 State: Aff - Purified State: Liquid purified Ig fraction (> 95% by SDS-PAGE) Preservative: 0.05% Sodium Azide
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 84 kDa
Gene Name:	semaphorin 4A
Database Link:	<u>Entrez Gene 20351 Mouse</u> <u>Entrez Gene 310630 Rat</u> <u>Entrez Gene 64218 Human</u> <u>Q9H3S1</u>



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Background:

Semaphorins are a family of cell surface and secreted proteins that are conserved from insects to humans. Members of this family of proteins are approximately 750 amino acids in length (including signal sequences) and are defined by a conserved extracellular "Semaphorin" domain of approximately 500 amino acids containing 14-16 cysteines, blocks of conserved sequences and no obvious repeats. The transmembrane semaphorins are characterized by an additional 80 amino acid transmembrane domain and an 80-110 amino acid cytoplasmic domain. Secreted and cell-bound semaphorins chemically attract and repel the growth of neural axons, guiding the development of intricate networks of neural tissue. Semaphorin 4A (SEMA4A), also designated Semaphorin B, is a type I membrane protein. The SEMA4A gene encoding the protein localizes to chromosome 1q22. SEMA4A provides signals to specify territories inaccessible for growing neurons, inhibiting axonal extension.

Synonyms:

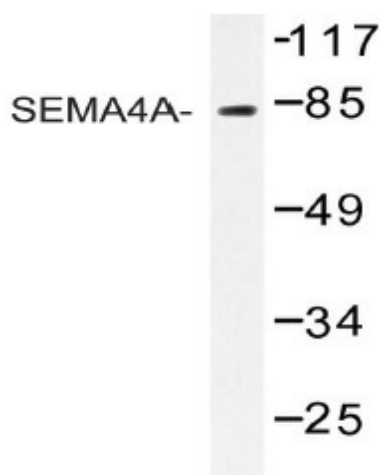
Semaphorin-4A, Semaphorin-B, Sema B, SEMAB, SEMB

Protein Families:

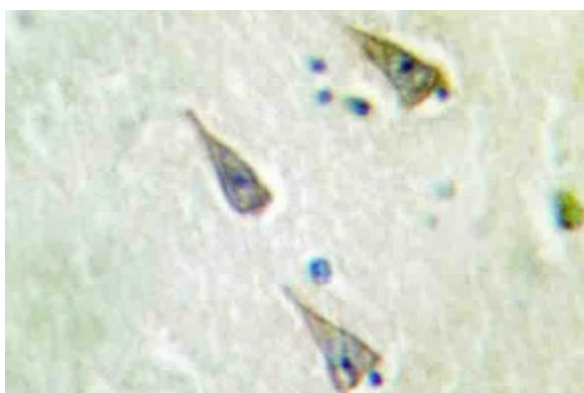
Transmembrane

Protein Pathways:

Axon guidance

Product images:


Western blot analysis of SEMA4A antibody Cat.-No.: [AP20459PU-N] in extracts from COS-7 cells.



Immunohistochemistry analysis of SEMA4A antibody Cat.-No. [AP20459PU-N] in paraffin-embedded human brain tissue.