

# Semaphorin 5A Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2712c

#### **Product Information**

Application WB, E Primary Accession Q13591

Other Accession D3ZTD8, Q62217
Reactivity Human, Mouse

Predicted Rat
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Clone Names RB16634
Calculated MW 120615
Antigen Region 90-113

## **Additional Information**

**Gene ID** 9037

Other Names Semaphorin-5A, Semaphorin-F, Sema F, SEMA5A, SEMAF

**Target/Specificity**This Semaphorin 5A antibody is generated from rabbits immunized with a

KLH conjugated synthetic peptide between 90-113 amino acids from human

Semaphorin 5A.

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

**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** Semaphorin 5A Antibody is for research use only and not for use in diagnostic

or therapeutic procedures.

#### **Protein Information**

Name SEMA5A

**Synonyms** SEMAF

**Function** Bifunctional axonal guidance cue regulated by sulfated proteoglycans;

attractive effects result from interactions with heparan sulfate proteoglycans (HSPGs), while the inhibitory effects depend on interactions with chondroitin sulfate proteoglycans (CSPGs) (By similarity). Ligand for receptor PLXNB3. In glioma cells, SEMA5A stimulation of PLXNB3 results in the disassembly of F-actin stress fibers, disruption of focal adhesions and cellular collapse as well as inhibition of cell migration and invasion through ARHGDIA-mediated inactivation of RAC1. May promote angiogenesis by increasing endothelial cell proliferation and migration and inhibiting apoptosis.

**Cellular Location** 

Membrane; Single-pass type I membrane protein.

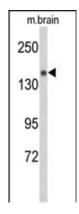
# **Background**

Semaphorin 5A belongs to the semaphorin gene family that encodes membrane proteins containing a semaphorin domain and several thrombospondin type-1 repeats. Members of this family are involved in axonal guidance during neural development.

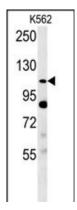
## References

Weiss, L.A., et.al., Nature 461 (7265), 802-808 (2009).

## **Images**



Western blot analysis of Semaphorin 5A-S106 Antibody(Cat. #AP2712c) in mouse brain tissue lysates (35ug/lane). Semaphorin 5A (arrow) was detected using the purified Pab.



Semaphorin 5A-S106 Antibody (Cat. #AP2712c) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the Semaphorin 5A antibody detected the Semaphorin 5A protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.