10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SEMA6A Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2740a

Product Information

Application	WB, E
Primary Accession	Q9H2E6
Other Accession	O35464, NP_065847.1
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21218
Calculated MW	114369
Antigen Region	29-57

Additional Information

Gene ID	57556
Other Names	Semaphorin-6A, Semaphorin VIA, Sema VIA, Semaphorin-6A-1, SEMA6A-1, SEMA6A, KIAA1368, SEMAQ
Target/Specificity	This SEMA6A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 29-57 amino acids from the N-terminal region of human SEMA6A.
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	SEMA6A Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SEMA6A
Synonyms	KIAA1368, SEMAQ

Function	Cell surface receptor for PLXNA2 that plays an important role in cell-cell signaling. Required for normal granule cell migration in the developing cerebellum. Promotes reorganization of the actin cytoskeleton and plays an important role in axon guidance in the developing central nervous system. Can act as repulsive axon guidance cue. Has repulsive action towards migrating granular neurons. May play a role in channeling sympathetic axons into the sympathetic chains and controlling the temporal sequence of sympathetic target innervation.
Cellular Location	Cell membrane; Single-pass type I membrane protein

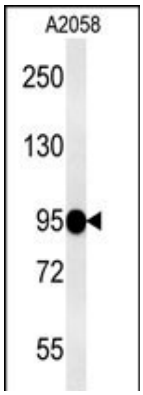
Background

SEMA6A belongs to a subfamily characterized by an extracellular semaphorin domain, a transmembrane domain, and a long cytoplasmic tail. Members of this class can repel sympathetic and dorsal root ganglion axons in vitro, consistent with a traditional role as guidance signals. However, the length of the cytoplasmic tail, which includes an EVL-binding site in SEMA6A and an Src-binding site in SEMA6B, suggests that these semaphorins may also function as receptors. SEMA6A is expressed in developing neural tissue and is required for proper development of the thalamocortical projection. SEMA6A directly links the Ena/VASP and the semaphorin protein families since the SEMA6A protein is capable of selective binding to the protein EVL (Ena/VASP-like protein).

References

Johnson, M.P., et al. Hum. Genet. 126(5):655-666(2009)
Landers, J.E., et al. Proc. Natl. Acad. Sci. U.S.A. 106(22):9004-9009(2009)
Prislei, S., et al. Mol. Cancer Ther. 7(1):233-241(2008)

Images



SEMA6A Antibody (N-term) (Cat. #AP2740a) western blot analysis in A2058 cell line lysates (15ug/lane).This demonstrates the SEMA6A antibody detected the SEMA6A protein (arrow).