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SEMA3A Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7760c

Product Information

Application	WB, IHC-P, E
Primary Accession	Q14563
Other Accession	Q63548, O08665, Q90607
Reactivity	Human
Predicted	Chicken, Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14591
Calculated MW	88889
Antigen Region	535-566

Additional Information

Gene ID	10371
Other Names	Semaphorin-3A, Semaphorin III, Sema III, SEMA3A, SEMAD
Target/Specificity	This SEMA3A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 535-566 amino acids from the Central region of human SEMA3A.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	SEMA3A Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SEMA3A
Synonyms	SEMAD
Function	Involved in the development of the olfactory system and in neuronal control

	of puberty. Induces the collapse and paralysis of neuronal growth cones. Could serve as a ligand that guides specific growth cones by a motility-inhibiting mechanism. Binds to the complex neuropilin-1/plexin-1.
Cellular Location	Secreted.
Tissue Location	Expressed in the dorsal root ganglia.

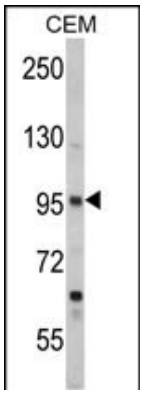
Background

SEMA3A is a member of the semaphorin family with an Ig-like C2-type (immunoglobulin-like) domain, a PSI domain and a Sema domain. This secreted protein can function as either a chemorepulsive agent, inhibiting axonal outgrowth, or as a chemoattractive agent, stimulating the growth of apical dendrites. In both cases, the protein is vital for normal neuronal pattern development. Increased expression of this protein is associated with schizophrenia and is seen in a variety of human tumor cell lines. Also, aberrant release of this protein is associated with the progression of Alzheimer's disease.

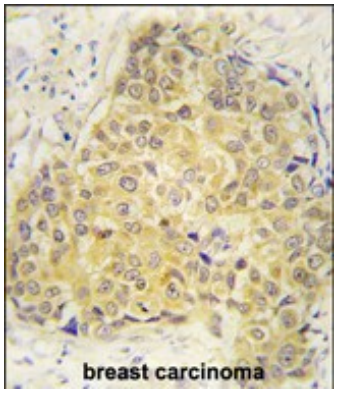
References

Narazaki,M., Blood 111 (8), 4126-4136 (2008)
Tannemaat,M.R., J. Neurosci. 27 (52), 14260-14264 (2007)
Appleton,B.A., EMBO J. 26 (23), 4902-4912 (2007)

Images



Western blot analysis of SEMA3A Antibody (Center) (Cat. #AP7760c) in CEM cell line lysates (35ug/lane). SEMA3A (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with SEMA3A antibody (Center) (Cat.#AP7760c), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

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