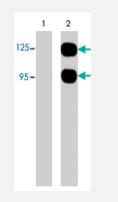
SEMA3A polyclonal antibody

Catalog # PAB7868 Size 100 uL

Applications



Western Blot

Western blots of neonatal rat brain (Iane 1) and human recombinant SEMA3A chimera (95/125 kDa) (Iane 2). Blots were probed with SEMA3A polyclonal antibody (Cat # PAB7868). The antibodies recognize both the 95 kDa and 125 kDa forms of the recombinant SEMA3A.

Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic peptide of SEMA3A.
Immunogen	A synthetic peptide corresponding to C-terminus of human SEMA3A.
Host	Rabbit
Reactivity	Human
Specificity	The sequence used has two amino acid differences from rat and mouse Sema3A, and has low homo logy to other semaphorin family members.
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:2000) Western Blot (1:500) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (50% glycerol, 1 mg/mL BSA, 0.05% sodium azide)



Product Information

Storage Instruction

Store at -20°C. Aliquot to avoid repeated freezing and thawing.

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

Western Blot

Western blots of neonatal rat brain (lane 1) and human recombinant SEMA3A chimera (95/125 kDa) (lane 2). Blots were probed with SEMA3A polyclonal antibody (Cat # PAB7868). The antibodies recognize both the 95 kDa and 125 kDa forms of the recombinant SEMA3A.

Enzyme-linked Immunoabsorbent Assay

Gene Info — SEMA3A

Entrez GenelD	<u>10371</u>
Gene Name	SEMA3A
Gene Alias	Hsema-I, Hsema-III, MGC133243, SEMA1, SEMAD, SEMAIII, SEMAL, SemD, coll-1
Gene Description	sema domain, immunoglobulin domain (lg), short basic domain, secreted, (semaphorin) 3A
Omim ID	<u>603961</u>
Gene Ontology	Hyperlink
Gene Summary	This gene is a member of the semaphorin family and encodes a protein with an lg-like C2-type (i mmunoglobulin-like) domain, a PSI domain and a Sema domain. This secreted protein can functi on as either a chemorepulsive agent, inhibiting axonal outgrowth, or as a chemoattractive agent, s timulating the growth of apical dendrites. In both cases, the protein is vital for normal neuronal patt ern development. Increased expression of this protein is associated with schizophrenia and is se en in a variety of human tumor cell lines. Also, aberrant release of this protein is associated with the progression of Alzheimer's disease. [provided by RefSeq
Other Designations	collapsin 1 semaphorin 3A semaphorin D semaphorin III semaphorin L semaphorin-like

Publication Reference



• Emerging roles for semaphorins in neural regeneration.

Pasterkamp RJ, Verhaagen J.

Brain Research. Brain Research Reviews 2001 Mar; 35(1):36.

• The semaphorin genes encode a family of transmembrane and secreted growth cone guidance molecules.

Kolodkin AL, Matthes DJ, Goodman CS. Cell 1993 Dec; 75(7):1389.

• Collapsin: a protein in brain that induces the collapse and paralysis of neuronal growth cones.

Luo Y, Raible D, Raper JA. Cell 1993 Oct; 75(2):217.

Pathway

Axon guidance

Disease

- <u>Alzheimer Disease</u>
- Genetic Predisposition to Disease
- Memory
- Schizophrenia
- <u>Schizophrenic Psychology</u>
- <u>Tobacco Use Disorder</u>