

# Semaphorin 3D Rabbit pAb

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Catalog # AP54692

## Product Information

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<b>Application</b>	IHC-P, IHC-F, IF
<b>Primary Accession</b>	<a href="#">O95025</a>
<b>Reactivity</b>	Mouse, Rat
<b>Predicted</b>	Human, Chicken, Dog, Pig, Horse, Rabbit
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	89651
<b>Physical State</b>	Liquid
<b>Immunogen</b>	KLH conjugated synthetic peptide derived from human Semaphorin 3D
<b>Epitope Specificity</b>	351-450/777
<b>Isotype</b>	IgG
<b>Purity</b>	affinity purified by Protein A
<b>Buffer</b>	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
<b>SUBCELLULAR LOCATION</b>	Secreted
<b>SIMILARITY</b>	Belongs to the semaphorin family. Contains 1 Ig-like C2-type (immunoglobulin-like) domain. Contains 1 PSI domain. Contains 1 Sema domain.
<b>Important Note</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>Background Descriptions</b>	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. Secreted and cell-bound semaphorins chemically attract and repel the growth of neural axons, guiding the development of intricate networks of neural tissue. SEMA3D (semaphorin-3D), also known as coll-2 or Sema-Z2, is a 777 amino acid secreted protein that belongs to the semaphorin family and participates in axon-axon interactions and neural crest activity. SEMA3D binds neuropilin and is able to induce the collapse and paralysis of neuronal growth cones, as well as act to repel specific neuronal populations. SEMA3D contains one immunoglobulin-like (Ig-like) domain, one PSI domain and one semaphorin domain.

## Additional Information

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<b>Gene ID</b>	223117
<b>Other Names</b>	Semaphorin-3D, SEMA3D
<b>Dilution</b>	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

<b>Storage</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
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## Protein Information

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<b>Name</b>	SEMA3D
<b>Function</b>	Induces the collapse and paralysis of neuronal growth cones. Could potentially act as repulsive cues toward specific neuronal populations. Binds to neuropilin (By similarity).
<b>Cellular Location</b>	Secreted.

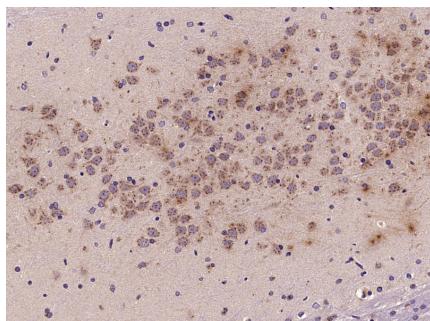
## Background

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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. Secreted and cell-bound semaphorins chemically attract and repel the growth of neural axons, guiding the development of intricate networks of neural tissue. SEMA3D (semaphorin-3D), also known as coll-2 or Sema-Z2, is a 777 amino acid secreted protein that belongs to the semaphorin family and participates in axon-axon interactions and neural crest activity. SEMA3D binds neuropilin and is able to induce the collapse and paralysis of neuronal growth cones, as well as act to repel specific neuronal populations. SEMA3D contains one immunoglobulin-like (Ig-like) domain, one PSI domain and one semaphorin domain.

## Images

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Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by microwave in sodium citrate buffer (pH6.0) ; Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes; Blocking buffer (3% BSA) at RT for 30min; Antibody incubation with (Semaphorin 3D) Polyclonal Antibody, Unconjugated (AP54692) at 1:400 overnight at 4°C, followed by conjugation to the secondary antibody (labeled with HRP)and DAB staining.

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