



Rabbit Anti-Semaphorin 3D antibody

SL11968R

Product Name:	Semaphorin 3D
Chinese Name:	Transmembrane proteinSEMA3D抗体
Alias:	Coll 2; Coll2; Collapsin 2; SEMA3D; Semaphorin3D; SEM3D HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Horse,Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	85kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Semaphorin 3D:351-450/777
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	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.

Function:

One family of inhibitory axon guidance molecules is the semaphorins. The semaphorins include secreted, transmembrane, and GPI anchored extracellular molecules that are involved in regulating axon guidance by inhibiting axons from growing toward incorrect targets. The class 3 semaphorins belong to the secreted group. Via interaction with its neuropilin receptor, semaphorin 3D plays a specific role in the induction of paralysis and collapse of neuronal growth cones. Semaphorin 3D could potentially act as repulsive cues toward specific neuronal populations.

Subcellular Location:

Secreted

Similarity:

Belongs to the semaphorin family.
Contains 1 Ig-like C2-type (immunoglobulin-like) domain.
Contains 1 PSI domain.
Contains 1 Sema domain.

SWISS:

O95025

Gene ID:

223117

Database links:

[Entrez Gene: 223117](#) Human

[Entrez Gene: 108151](#) Mouse

[Omim: 609907](#) Human

[SwissProt: O95025](#) Human

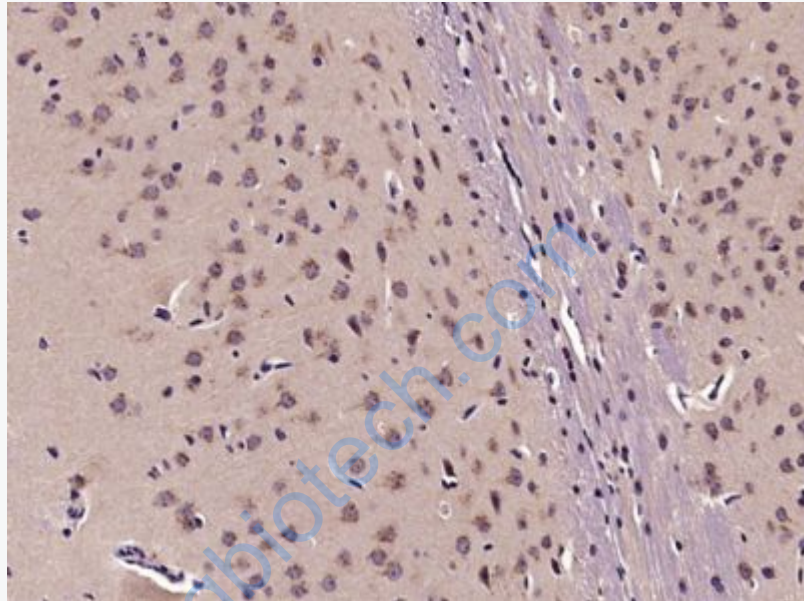
[SwissProt: Q8BH34](#) Mouse

[Unigene: 201340](#) Human

[Unigene: 89313](#) Mouse

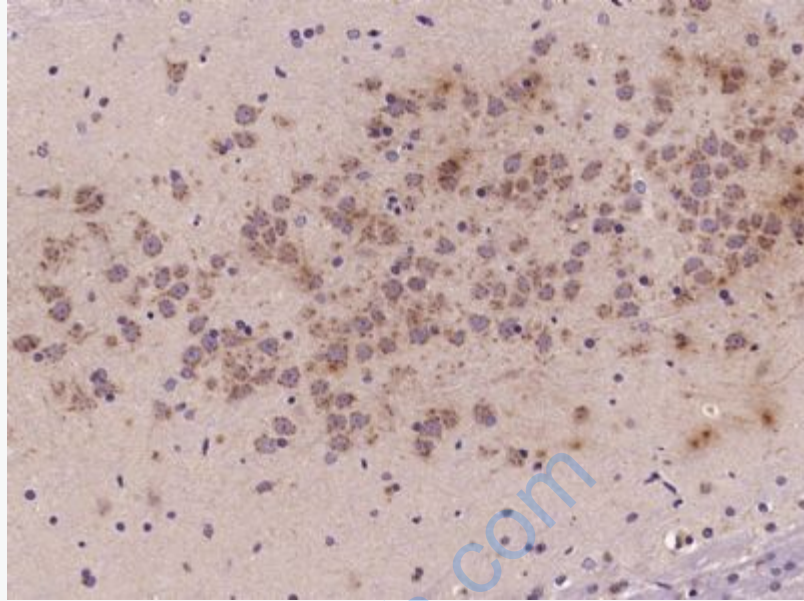
Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Paraformaldehyde-fixed, paraffin embedded (Mouse 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 (SL11968R) at 1:400 overnight at 4°C, followed by conjugation to the secondary antibody (labeled with HRP) and DAB staining.



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 (SL11968R) at 1:400 overnight at 4°C, followed by conjugation to the secondary antibody (labeled with HRP) and DAB staining.