

Rabbit Anti-Semaphorin 3D antibody

SL11968R

Product Name	Semaphorin 3D
Chinese Name	Transmembrane protein SEMA3D 抗体
Alias	Coll 2; Coll2; Collapsin 2; SEMA3D; Semaphorin3D; SEM3D_HUMAN.
Research Area	Cell biology Developmental biology Neurobiology
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Mouse,Rat(predicted:Human,Chicken,Dog,Pig,Horse,Rabbit) IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	85kDa
Cellular localization	Secretory protein
Form	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
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
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

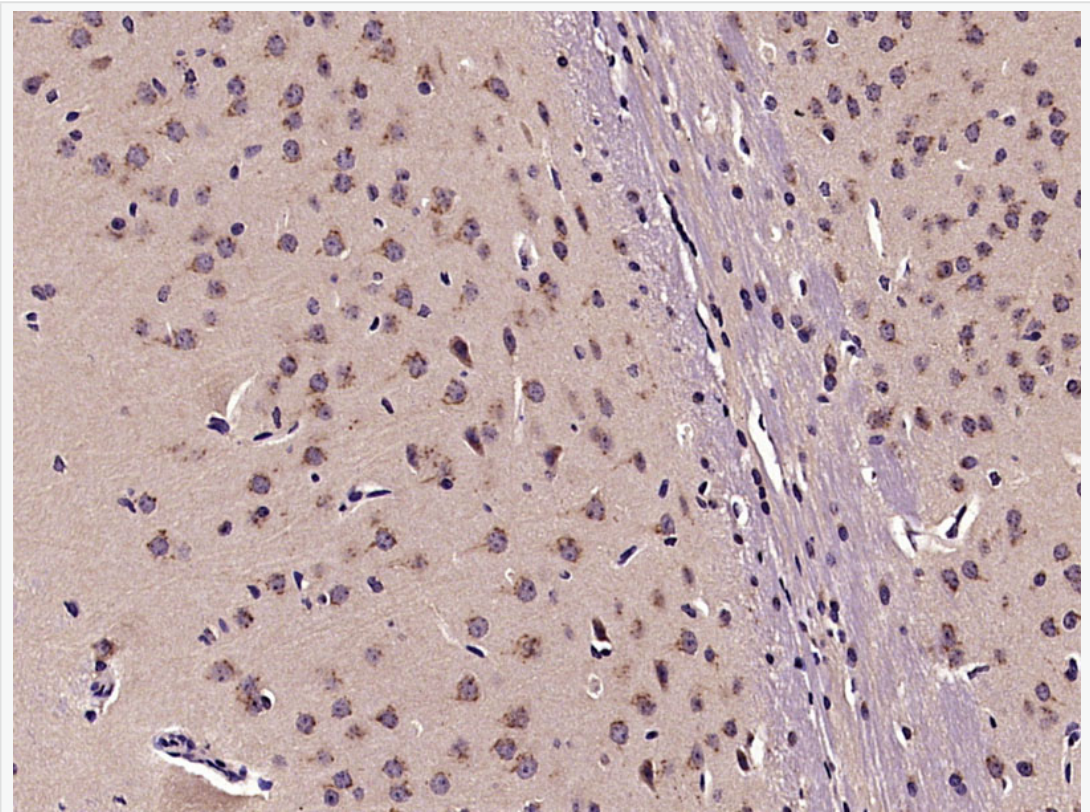
[SwissProt: O95025](#) Human

[SwissProt: Q8BH34](#) Mouse

[Unigene: 201340](#) Human

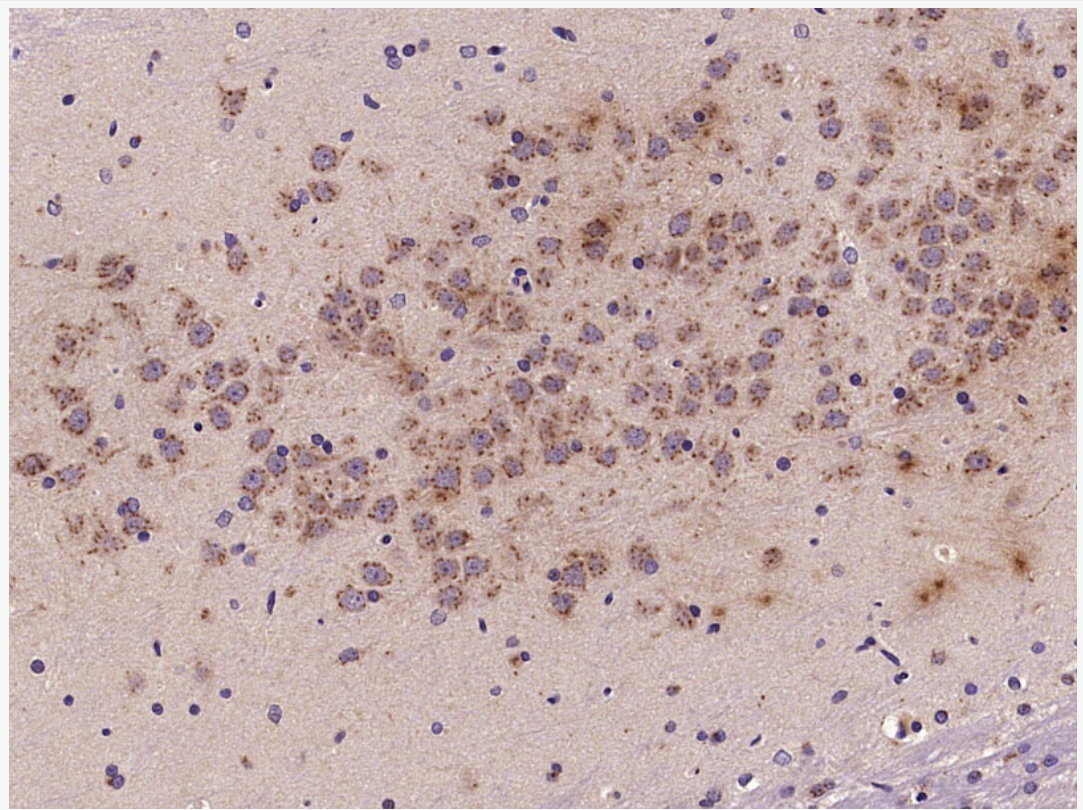
[Unigene: 89313](#) Mouse

**Product
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.