

# Immunotag™ SEMA4A Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT4235
Product Description	Immunotag™ SEMA4A Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	SEMA4A
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,IF,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat,Monkey
Host Species	Rabbit
Immunogen	The antiserum was produced against synthesized peptide derived from human SEMA4A. AA range:501-550
Specificity	SEMA4A Polyclonal Antibody detects endogenous levels of SEMA4A protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	SEMA4A
Accession No.	Q9H3S1 Q62178
Alternate Names	SEMA4A; SEMAB; SEMB; Semaphorin-4A; Semaphorin-B; Sema B

## Antibody Specification

Description	semaphorin 4A(SEMA4A) Homo sapiens This gene encodes a member of the semaphorin family of soluble and transmembrane proteins. Semaphorins are involved in numerous functions, including axon guidance, morphogenesis, carcinogenesis, and immunomodulation. The encoded protein is a single-pass type I membrane protein containing an immunoglobulin-like C2-type domain, a PSI domain and a sema domain. It inhibits axonal extension by providing local signals to specify territories inaccessible for growing axons. It is an activator of T-cell-mediated immunity and suppresses vascular endothelial growth factor (VEGF)-mediated endothelial cell migration and proliferation in vitro and angiogenesis in vivo. Mutations in this gene are associated with retinal degenerative diseases including retinitis pigmentosa type 35 (RP35) and cone-rod dystrophy type 10 (CORD10). Multiple alternatively spliced transcript variants encoding different isoforms have been identif
Cell Pathway/ Category	Axon guidance,
Protein Expression	Colon,Mammary gland,Placenta,Salivary gland,Tongue,
Subcellular Localization	extracellular space,plasma membrane,integral component of membrane,
Protein Function	disease:Defects in SEMA4A are the cause of cone-rod dystrophy type 10 (CORD10) [MIM:610283]. CORDs are inherited retinal dystrophies belonging to the group of pigmentary retinopathies. CORDs are characterized by retinal pigment deposits visible on fundus examination, predominantly in the macular region, and initial loss of cone photoreceptors followed by rod degeneration. This leads to decreased visual acuity and sensitivity in the central visual field, followed by loss of peripheral vision. Severe loss of vision occurs earlier than in retinitis pigmentosa.,disease:Defects in SEMA4A are the cause of retinitis pigmentosa type 35 (RP35) [MIM:610282]. RP leads to degeneration of retinal photoreceptor cells. Patients typically have night vision blindness and loss of midperipheral visual field. As their condition progresses, they lose their far peripheral visual field and eventually central vision as well.,function:Inhibits axonal extension by providing local signals to specify territories inaccessible for growing axons.,similarity:Belongs to the semaphorin family.,similarity:Contains 1 Ig-like C2-type (immunoglobulin-like) domain.,similarity:Contains 1 PSI domain.,similarity:Contains 1 Sema domain.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.