



# SEMA4A Monoclonal Antibody

<b>Catalog No</b>	YP-mAb-04194
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat;Monkey
<b>Applications</b>	WB
<b>Gene Name</b>	SEMA4A
<b>Protein Name</b>	Semaphorin-4A
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human SEMA4A. AA range:501-550
<b>Specificity</b>	SEMA4A Monoclonal Antibody detects endogenous levels of SEMA4A protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Monoclonal, Mouse,IgG
<b>Purification</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-1:2000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	SEMA4A; SEMAB; SEMB; Semaphorin-4A; Semaphorin-B; Sema B
<b>Observed Band</b>	84kD
<b>Cell Pathway</b>	Cell membrane ; Single-pass type I membrane protein .
<b>Tissue Specificity</b>	Colon,Mammary gland,Placenta,Salivary gland,Tongue,
<b>Function</b>	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 v
<b>Background</b>	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 identified.

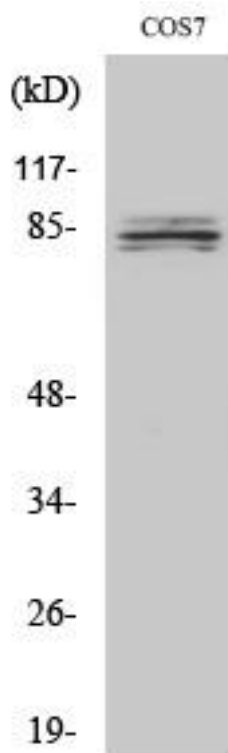
**matters needing attention**

Avoid repeated freezing and thawing!

**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

**Products Images**



Western Blot analysis of various cells using SEMA4A Monoclonal Antibody