

**KO599**

For research use only

# Anti Mouse Sema4b Monoclonal Antibody

**Clone No. TK-2**

**Code No.** KO599  
**Target** Sema4b  
**Category** Neuroscience  
**Gene ID** 20352  
**Primary Source** MGI:107559  
**Synonyms** SemC; Semac; KIAA1745; mKIAA1745

**Type** Monoclonal Antibody  
**Immunogen** recombinant protein of mouse Sema4B extracellular domain

**Raised in** Rat  
**Myeloma** P3U1  
**Clone number** TK-2  
**Purification** KAPTIV-M  
**Source** Serum-free medium  
**Isotype** IgM

**Cross Reactivity** -

**Label** Unlabeled

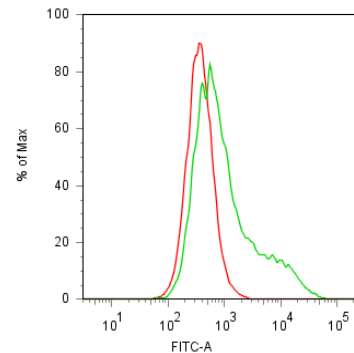
**Concentration** 0.25 mg/mL

**Contents (Volume)** 25µg (100 µL/vial)

**Buffer** PBS [containing 2% Block Ace as a stabilizer, 0.1% Proclin as a bacteriostat]

**Storage** Store at - 20 °C long term, store at 4 °C short term. Avoid repeated freeze-thaw cycles.

**Application** ELISA, IP, FCM



[FCM] COS cell expressing mouse Sema4b

The data is provided from Research Institute for Microbial Diseases, Osaka Univ., Japan.

	ELISA	WB	IHC	ICC
	1.0	Not tested	Not tested	Not tested
	IP	FCM	IF	Neutralization
	5.0	0.05	Not tested	Not tested

(µg/mL)

## Reference

- "Prediction of the coding sequences of mouse homologues of KIAA gene: IV. The complete nucleotide sequences of 500 mouse KIAA-homologous cDNAs identified by screening of terminal sequences of cDNA clones randomly sampled from size-fractionated libraries." Okazaki N., et al. DNA Res. 11:205-218(2004) [PubMed: 15368895] [Abstract] Tissue: Pancreatic islet.
- "Murine semaphorin D/collapsin is a member of a diverse gene family and creates domains inhibitory for axonal extension." Pueschel A.W., et al. Neuron 14:941-948(1995) [PubMed: 7748561] [Abstract] Cited for: NUCLEOTIDE SEQUENCE [MRNA] OF 42-823. Strain: NMRI. Tissue: Brain.
- "A PDZ protein regulates the distribution of the transmembrane semaphorin, M-SemF." Wang L.-H., et al. J. Biol. Chem. 274:14137-14146(1999) [PubMed: 10318831] [Abstract]

## UniPlot Summary

Function// Inhibits axonal extension by providing local signals to specify territories inaccessible for growing axons.

Subunit structure// Interacts with GIPC PDZ domain. Ref.4

Subcellular location// Membrane; Single-pass type I membrane protein.

Developmental stage// Expressed from day 10 in the embryo. Low levels found between days 10-12. Expression peaks on day 13 with moderate levels from then until birth.

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