

Mouse Semaphorin 3B/SEMA3B Monoclonal Antibody | anti-SEMA3B antibody

Anti-Semaphorin 3B/SEMA3B Antibody Picoband (monoclonal, 9C4F7)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126951	Mouse	Human, Mouse, Rat	Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

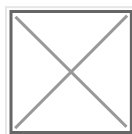
PRODUCT SYNONYMS

Semaphorin 3B/SEMA3B; Monoclonal Antibody; Anti-Semaphorin 3B/SEMA3B Antibody Picoband (monoclonal; 9C4F7); anti-SEMA3B antibody

PRODUCT SPECIFICATIONS

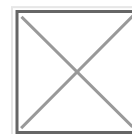
Host	Mouse
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Isotype	Mouse IgG2b
Clone Number	9C4F7
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-SEMA3B antibody	FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	E Coli-derived human Semaphorin 3B/SEMA3B recombinant protein (Position: Y55-R624).
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of HepG2 cells using anti-Semaphorin 3B/SEMA3B antibody (AAA126951). Overlay histogram showing HepG2 cells stained with AAA126951 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Semaphorin 3B/SEMA3B Antibody (AAA126951, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-mouse IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was mouse IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 2. IF analysis of Semaphorin 3B/SEMA3B using anti-Semaphorin 3B/SEMA3B antibody (AAA126951). Semaphorin 3B/SEMA3B was detected in an immunocytochemical section of HeLa cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL mouse anti-Semaphorin 3B/SEMA3B Antibody (AAA126951) overnight at 4 degree C. DyLight488 Conjugated Goat Anti-Mouse IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)

Figure 1. Western blot analysis of Semaphorin 3B/SEMA3B using anti-Semaphorin 3B/SEMA3B antibody (AAA126951). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: human CACO-2 whole cell lysates, Lane 3: human U87 whole cell lysates, Lane 4: human K562 whole cell lysates, Lane 5: rat kidney tissue lysates, Lane 6: rat NRK whole cell lysates, Lane 7: mouse kidney tissue lysates, Lane 8: mouse ANA-1 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-Semaphorin 3B/SEMA3B antigen affinity purified monoclonal antibody (#AAA126951) at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Semaphorin 3B/SEMA3B at approximately 83 kDa. The expected band size for Semaphorin 3B/SEMA3B is at 83 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-SEMA3B antibody	Semaphorin-3B is a protein that in humans is encoded by the SEMA3B gene. It is mapped to 3p21.31. The semaphorin/collapsin family of molecules plays a critical role in the guidance of growth cones during neuronal development. The secreted protein encoded by this gene family member is important in axonal guidance and has been shown to act as a tumor suppressor by inducing apoptosis.
Product Categories/Family for anti-SEMA3B antibody	Primary Antibodies, Mouse Monoclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	586798180
NCBI GeneID	7869
NCBI Accession #	NP_001276989.1
NCBI GenBank Nucleotide #	NM_001290060.1
UniProt Accession #	Q13214; Q6GU46; Q8TB71; Q8TDV7; Q93018; Q96GX0
Molecular Weight	83,035 Da
NCBI Official Full Name	semaphorin-3B isoform 1
NCBI Official Synonym Full Names	semaphorin 3B
NCBI Official Symbol	SEMA3B
NCBI Official Synonym Symbols	SemaA; SEMA5; SEMAA; semaV; LUCA-1
NCBI Protein Information	semaphorin-3B
UniProt Protein Name	Semaphorin-3B
UniProt Gene Name	SEMA3B
UniProt Synonym Gene Names	SEMA5; SEMAA; Sema V

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.