

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

Catalog Number: M06559

About SEMA3B

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.

Overview

Product Name	Anti-Semaphorin 3B/SEMA3B Antibody Picoband® (monoclonal, 9C4F7)
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Semaphorin 3B/SEMA3B Antibody Picoband® (monoclonal, 9C4F7) catalog # M06559. Tested in Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	Flow Cytometry, IF, ICC, WB
Clonality	Monoclonal 9C4F7
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Mouse
Uniprot ID	Q13214

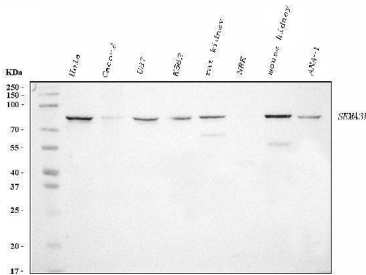
Technical Details

Immunogen	E.coli-derived human Semaphorin 3B/SEMA3B recombinant protein (Position: Y55-R624).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Mouse IgG (EK1001) for Western blot, and HRP Conjugated anti-Mouse IgG Super Vision Assay Kit (SV0001-1) for ICC.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Mouse IgG2b
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.
Purification	Immunogen affinity purified.

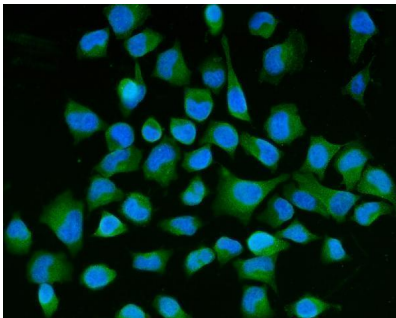
Suggested Dilutions

Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat
Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human
Flow Cytometry (Fixed), 1-3 ug/1x10⁶ cells, Human

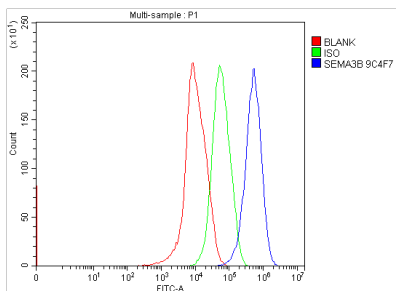
Anti-Semaphorin 3B/SEMA3B Antibody Picoband® (monoclonal, 9C4F7) (M06559) Images



Western blot analysis of Semaphorin 3B/SEMA3B using anti-Semaphorin 3B/SEMA3B antibody (M06559). 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 (Catalog # M06559) at 0.5 ug/mL overnight at 4°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 (Catalog # EK1001) 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.



IF analysis of Semaphorin 3B/SEMA3B using anti-Semaphorin 3B/SEMA3B antibody (M06559). 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 (M06559) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of HepG2 cells using anti-Semaphorin 3B/SEMA3B antibody (M06559). Overlay histogram showing HepG2 cells stained with M06559 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Semaphorin 3B/SEMA3B Antibody (M06559, 1 ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample without

incubation with primary antibody and secondary antibody
(Red line) was used as a blank control.

Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



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

For Research Use Only. Not for use in diagnostic procedures.