

Rabbit Sema6A Polyclonal Antibody | anti-SEMA6A antibody

Anti-Sema6A Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125781	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

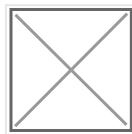
PRODUCT SYNONYMS

Sema6A; Polyclonal Antibody; Anti-Sema6A Antibody; Semaphorin-6A; Semaphorin VIA; Sema VIA; Semaphorin-6A-1; SEMA6A-1; SEMA6A; KIAA1368; SEMAQ; semaphorin 6A; anti-SEMA6A antibody

PRODUCT SPECIFICATIONS

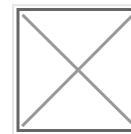
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for Sema6A detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.01mg NaN ₃ .
Applicable Applications for anti-SEMA6A antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived human Sema6A recombinant protein (Position: H31-N306).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of HEPG2 cells using anti-Sema6A antibody (AAA125781). Overlay histogram showing HEPG2 cells stained with AAA125781 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Sema6A Antibody (AAA125781, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of Sema6A using anti-Sema6A antibody (AAA125781). Sema6A was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-Sema6A Antibody (AAA125781) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of Sema6A using anti-Sema6A antibody (AAA125781). 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 50ug of sample under reducing conditions. Lane 1: human HEK293 whole cell lysates Lane 2: human HELA whole cell lysates Lane 3: human Raji whole cell lysates Lane 4: human U2OS whole cell lysates Lane 5: human Jurkat whole cell lysates Lane 6: human CACO-2 whole cell lysates Lane 7: rat brain tissue lysates Lane 8: rat PC-12 whole cell lysates Lane 9: mouse brain tissue lysates Lane 10: mouse RAW264. 7 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-Sema6A antigen affinity purified polyclonal antibody (Catalog # AAA125781) at 0. 25 μg/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-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 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 Sema6A at approximately 114KD. The expected band size for Sema6A is at 114KD.

ADDITIONAL INFORMATION

Related Product Information for anti-SEMA6A antibody	SEMA6A belongs to a subfamily characterized by an extracellular semaphorin domain, a transmembrane domain, and a long cytoplasmic tail. Members of this class can repel sympathetic and dorsal root ganglion axons in vitro, consistent with a traditional role as guidance signals. However, the length of the cytoplasmic tail, which includes an EVL-binding site in SEMA6A and an Src-binding site in SEMA6B, suggests that these semaphorins may also function as receptors. SEMA6A is expressed in developing neural tissue and is required for proper development of the thalamocortical projection. SEMA6A directly links the Ena/VASP and the semaphorin protein families since the SEMA6A protein is capable of selective binding to the protein EVL (Ena/VASP-like protein).
References	1. Janssen, B. J. C., Robinson, R. A., Perez-Branguli, F., Bell, C. H., Mitchell, K. J., Siebold, C., Jones, E. Y. Structural basis of semaphorin-plexin signalling. Nature 467: 1118-1122, 2010. 2. Klostermann, A., Lutz, B., Gertler, F., Behl, C. The orthologous human and murine semaphorin 6A-1 proteins (SEMA6A-1/Sema6A-1) bind to the enabled/vasodilator-stimulated phosphoprotein-like protein (EVL) via a novel carboxyl-terminal zyxin-like domain. J. Biol. Chem. 275: 39647-39653, 2000. 3. Leighton, P. A., Mitchell, K. J., Goodrich, L. V., Lu, X., Pinson, K., Scherz, P., Skarnes, W. C., Tessier-Lavigne, M. Defining brain wiring patterns and mechanisms through gene trapping in mice. Nature 410: 174-179, 2001.

NCBI AND UNIPROT INFORMATION

NCBI GI #	11991660
NCBI GeneID	57556
NCBI Accession #	NP_065847.1
NCBI GenBank Nucleotide #	NM_020796.4
UniProt Accession #	Q9H2E6; Q9P2H9
Molecular Weight	116,336 Da
NCBI Official Full Name	semaphorin-6A isoform 2
NCBI Official Synonym Full Names	semaphorin 6A
NCBI Official Symbol	SEMA6A
NCBI Official Synonym Symbols	VIA; SEMA; HT018; SEMAQ; SEMA6A1
NCBI Protein Information	semaphorin-6A
UniProt Protein Name	Semaphorin-6A
UniProt Gene Name	SEMA6A

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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/sema6a-antibody-direct-elisa-flow-cytometry-immunohistochemistry-western-blot-elisa/125781>