

Rabbit KIF1A Polyclonal Antibody | anti-KIF1A antibody

Anti-KIF1A Antibody Picoband

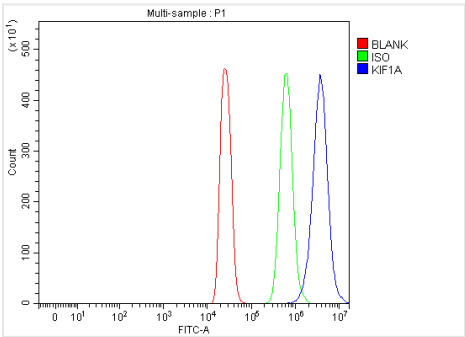
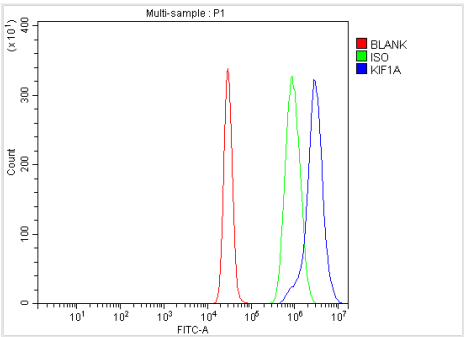
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127199	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Western Blot

PRODUCT SYNONYMS

KIF1A; Polyclonal Antibody; Anti-KIF1A Antibody Picoband; Heterogeneous nuclear ribonucleoprotein L; S-antigen visual arrestin ; S-arrestin; 48 kDa protein; Retinal S-antigen; S-AG; Rod photoreceptor arrestin; SAG; anti-KIF1A antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Retina and pineal gland.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-KIF1A antibody	ELISA, FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E coli-derived human KIF1A recombinant protein (Position: H1079-Y1628).
Subcellular Localization	Nucleus, nucleoplasm, Cytoplasm, Localized in cytoplasmic mRNP granules containing untranslated mRNAs. These granules are not identical with P bodies or stress granules.
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Arrestin is one of the major proteins of the ros (retinal rod outer segments); it binds to photoactivated-phosphorylated rhodopsin, thereby apparently preventing the transducin-mediated activation of phosphodiesterase.
Preparation and Storage	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.

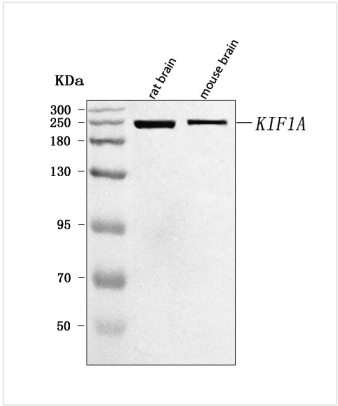


FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of K562 cells using anti-KIF1A antibody (AAA127199).Overlay histogram showing K562 cells stained with AAA127199 (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 rabbit anti-KIF1A Antibody (AAA127199, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of 293T cells using anti-KIF1A antibody (AAA127199).Overlay histogram showing 293T cells stained with AAA127199 (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 rabbit anti-KIF1A Antibody (AAA127199, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



WB (Western Blot)

Figure 1. Western blot analysis of KIF1A using anti-KIF1A antibody (AAA127199).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: rat brain tissue lysates,Lane 2: mouse brain tissue 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 rabbit anti-KIF1A antigen affinity purified polyclonal antibody (#AAA127199) at 0.5ug/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 KIF1A at approximately 191 kDa. The expected band size for KIF1A is at 191 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-KIF1A antibody	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.
Product Categories/Family for anti-KIF1A antibody	Primary Antibodies; DNA/RNA; Epigenetics and Nuclear Signaling; Nucleus; RNA Processing; Subcellular Markers; Tags & Cell Markers

References	1. Chiba, K., Takahashi, H., Chen, M., Obinata, H., Arai, S., Hashimoto, K., Oda, T., McKenney, R. J., Niwa, S. Disease-associated mutations hyperactivate KIF1A motility and anterograde axonal transport of synaptic vesicle precursors. Proc. Nat. Acad. Sci. 116: 18429-18434, 2019. 2. Citterio, A., Arnoldi, A., Panzeri, E., Merlini, L., D'Angelo, M. G., Musumeci, O., Toscano, A., Bondi, A., Martinuzzi, A., Bresolin, N., Bassi, M. T. Variants in KIF1A gene in dominant and sporadic forms of hereditary spastic paraparesis. J. Neurol. 262: 2684-2690, 2015. 3. Erlich, Y., Edvardson, S., Hodges, E., Zenvirt, S., Thekkat, P., Shaag, A., Dor, T., Hannon, G. J., Elpeleg, O. Exome sequencing and disease-network analysis of a single family implicate a mutation in KIF1A in hereditary spastic paraparesis. Genome Res. 21: 658-664, 2011.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	119591621
NCBI GeneID	547
UniProt Accession #	Q12756; O95068; Q13355; Q14752; Q2NKJ6; Q4LE42; Q53T78; Q59GH1; Q63Z40; Q6P1R9; B0I1S5; F5H045
Molecular Weight	191,064 Da
NCBI Official Full Name	kinesin family member 1A, isoform CRA_b
NCBI Official Synonym Full Names	kinesin family member 1A
NCBI Official Symbol	KIF1A
NCBI Official Synonym Symbols	ATSV; MRD9; HSN2C; SPG30; UNC104; C2orf20
NCBI Protein Information	kinesin-like protein KIF1A; tmp_locus_27; microtubule-based motor KIF1A; unc-104- and KIF1A-related protein; axonal transporter of synaptic vesicles; kinesin, heavy chain, member 1A, homolog of mouse
UniProt Protein Name	Kinesin-like protein KIF1A
UniProt Gene Name	KIF1A
UniProt Synonym Gene Names	ATSV; C2orf20; hUnc-104
UniProt Entry Name	KIF1A_HUMAN

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://www.aaabiotech.com/polyclonal/kif1a-antibody-flow-cytometry-western-blot-elisa/127199>