

Rabbit KLC1 Polyclonal Antibody | anti-KLC1 antibody

Anti-KLC1 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126353	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

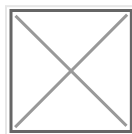
PRODUCT SYNONYMS

KLC1; Polyclonal Antibody; Anti-KLC1 Antibody Picoband; anti-KLC1 antibody

PRODUCT SPECIFICATIONS

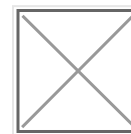
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-KLC1 antibody	ELISA, 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 KLC1 recombinant protein (Position: M1-D537).
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 4. Flow Cytometry analysis of Caco-2 cells using anti-KLC1 antibody (AAA126353). Overlay histogram showing Caco-2 cells stained with AAA126353 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-KLC1 Antibody (AAA126353, 1 ug/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 (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 3. IF analysis of KLC1 using anti-KLC1 antibody (AAA126353). KLC1 was detected in an immunocytochemical section of PC-3 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 rabbit anti-KLC1 Antibody (AAA126353) overnight at 4 degree C. DyLight594 Conjugated Goat Anti-Rabbit IgG (BA1142) 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 2. Western blot analysis of KLC1 using anti-KLC1 antibody (AAA126353). 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: rat skeletal muscle tissue lysates, Lane 3: mouse brain tissue lysates, Lane 4: mouse lung 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-KLC1 antigen affinity purified polyclonal antibody (#AAA126353) 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-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 KLC1 at approximately 65-75 kDa. The expected band size for KLC1 is at 65-75 kDa.



WB (Western Blot)

Figure 1. Western blot analysis of KLC1 using anti-KLC1 antibody (AAA126353). 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 U-87MG whole cell lysates, Lane 3: human SH-SY5Y whole cell lysates, Lane 4: human COLO-320 whole cell lysates, Lane 5: human HepG2 whole cell lysates, Lane 6: human PC-3 whole cell lysates, Lane 7: human Hacat 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 rabbit anti-KLC1 antigen affinity purified polyclonal antibody (#AAA126353) 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-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 KLC1 at approximately 65-75 kDa. The expected band size for KLC1 is at 65-75 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-KLC1 antibody	Kinesin light chain 1 is a protein that in humans is encoded by the KLC1 gene. Conventional kinesin is a tetrameric molecule composed of two heavy chains and two light chains, and transports various cargos along microtubules toward their plus ends. The heavy chains provide the motor activity, while the light chains bind to various cargos. This gene encodes a member of the kinesin light chain family. It associates with kinesin heavy chain through an N-terminal domain, and six tetratricopeptide repeat (TPR) motifs are thought to be involved in binding of cargos such as vesicles, mitochondria, and the Golgi complex. Thus, kinesin light chains function as adapter molecules and not motors per se. Although previously named "kinesin 2", this gene is not a member of the kinesin-2/kinesin heavy chain subfamily of kinesin motor proteins. Extensive alternative splicing produces isoforms with different C-termini that are proposed to bind to different cargos; however, the full-length nature and/or biological validity of most of these variants have not been determined.
Product Categories/Family for anti-KLC1 antibody	Primary Antibodies , Rabbit Polyclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	194306559
NCBI GeneID	3831
NCBI Accession #	NP_001123579.1
NCBI GenBank Nucleotide #	NM_001130107.1
UniProt Accession #	Q07866 ; Q7RTM2 ; Q7RTM3 ; Q7RTM5 ; Q7RTP9 ; Q7RTQ5 ; Q7RTQ6 ; Q86SF5 ; Q86TF5 ; Q86V74 ; Q86V75 ; A6NMF2 ; Q13865 ; Q7RTP8 ; Q7RTQ0 ; Q7RTQ1 ; Q7RTQ2 ; Q7RTQ3 ; Q7RTQ4 ; Q7RTQ7 ; Q7RTQ8
Molecular Weight	65,310 Da
NCBI Official Full Name	kinesin light chain 1 isoform 3
NCBI Official Synonym Full Names	kinesin light chain 1
NCBI Official Symbol	KLC1
NCBI Official Synonym Symbols	KLC; KNS2; KNS2A; MGC15245
NCBI Protein Information	kinesin light chain 1; KLC 1; OTTHUMP00000240450; OTTHUMP00000240451; OTTHUMP00000240452; OTTHUMP00000240453; OTTHUMP00000240454; kinesin 2 60/70kDa; medulloblastoma antigen MU-MB-2.50
UniProt Protein Name	Kinesin light chain 1
UniProt Gene Name	KLC1

UniProt Synonym Gene Names	KLC; KNS2
UniProt Entry Name	KLC1_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://stage.aaabiotech.com/polyclonal/klc1-antibody-flow-cytometry-immunofluorescence-immunocytochemistry-western-blot-elisa/126353>