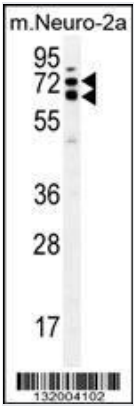
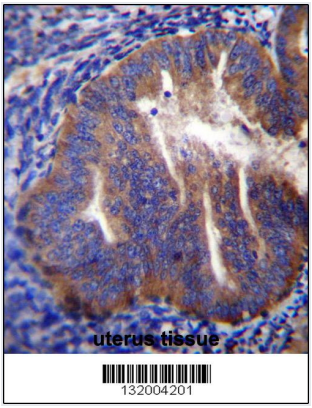
KLC2 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

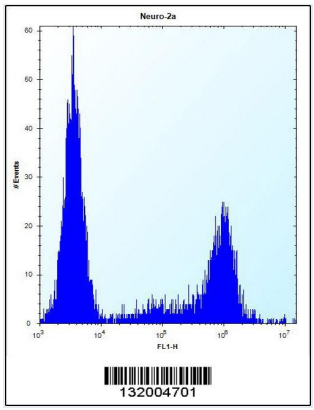
Product Name	KLC2, Polyclonal Antibody
Full Product Name	KLC2, NT (KLC2, Kinesin light chain 2) (FITC)
Product Gene Name	anti-KLC2 antibody
Product Synonym Names	KLC2; Kinesin light chain 2
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with Fluorescein Isothiocyanate (FITC).
Purity/Purification	Purified by Protein A Affinity Chromatography.
Preparation and Storage	Store product at 4 degree C if to be used immediately within two weeks. For long-term storage, aliquot to avoid repeated freezing and thawing and store at -20 degree C. Aliquots are stable at -20 degree C for 12 months after receipt. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Caution: FITC conjugates are sensitive to light. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.
OMIM	611729
3D Structure	ModBase 3D Structure for Q9H0B6
Immunogen	KLC2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 127-156 amino acids from the N-terminal region of human KLC2.
Conjugate	FITC
Note	Preservative Free
Special Handling	Light sensitive
Product Categories/Family for anti-KLC2 antibody	Antibodies; Proteins
Applications Tested/Suitable for anti-KLC2 antibody	Flow Cytometry (FC/FACS), FLISA, Immunohistochemistry (IHC), Western Blot (WB)
Application Notes for anti-KLC2 antibody	FC/FACS: 1:10-50 FLISA: 1:1,000 IHC: 1:10-50 WB: 1:100-500 Applications are based on unconjugated antibody.
Related Product Information for anti-KLC2 antibody	MBS6313867 is an antibody targeting KLC2. Also known as KLC2, NT (KLC2, Kinesin light chain 2) (FITC). Reactive in Human, Mouse. Host: Rabbit.
Product References and Citations for anti-KLC2 antibody	Trejo, H.E., et al. FASEB J. 24(2):374-382(2010). Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007). Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007): Olsen, J.V., et al. Cell 127(3):635-648(2006). Olsen, J.V., et al. Cell 127(3):635-648(2006).
Other Notes	Small volumes of anti-KLC2 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Western Blot (WB) of anti-KLC2 antibody
KLC2 Antibody (N-term) western blot analysis in mouse Neuro-2a cell line lysates (35ug/lane).This demonstrates the KLC2 antibody detected the KLC2 protein (arrow).



Immunohistochemistry (IHC) of anti-KLC2 antibody
KLC2 Antibody (N-term) immunohistochemistry analysis in formalin fixed and paraffin embedded human uterus tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of KLC2 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



Flow Cytometry (FC/FACS) of anti-KLC2 antibody
KLC2 Antibody (N-term) flow cytometric analysis of Neuro-2a cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for KLC2. It may not necessarily be applicable to this product.

NCBI GI #	12383062
NCBI GeneID	64837
NCBI Accession #	NP_073733.1
UniProt Primary Accession #	Q9H0B6
UniProt Related Accession #	Q9H0B6
GenBank Nucleotide #	NP_073733.1
NCBI Official Full Name	kinesin light chain 2 isoform 1
NCBI Official Synonym Full Names	kinesin light chain 2
NCBI Official Symbol	KLC2
UniProt Protein Name	Kinesin light chain 2
Protein Family	Kinesin
UniProt Gene Name	KLC2
UniProt Synonym Gene Names	KLC 2

UniProt Entry Name	KLC2_HUMAN
NCBI Protein Information	kinesin light chain 2
NCBI Summary for KLC2	The protein encoded by this gene is a light chain of kinesin, a molecular motor responsible for moving vesicles and organelles along microtubules. Defects in this gene are a cause of spastic paraplegia, optic atrophy, and neuropathy (SPOAN) syndrome. [provided by RefSeq, Mar 2016]
UniProt Comments for KLC2	KLC2: Kinesin is a microtubule-associated force-producing protein that may play a role in organelle transport. The light chain may function in coupling of cargo to the heavy chain or in the modulation of its ATPase activity. Belongs to the kinesin light chain family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Motor; Microtubule-binding Chromosomal Location of Human Ortholog: 11q13.2 Cellular Component: ciliary rootlet; microtubule; kinesin complex; neuron projection; protein complex; membrane; cytosol Molecular Function: protein binding; kinesin binding; microtubule motor activity Biological Process: metabolic process; axon cargo transport; antigen processing and presentation of exogenous peptide antigen via MHC class II; blood coagulation; microtubule-based movement
Research Articles on KLC2	**1.** a homozygous 216-bp deletion located at the non-coding upstream region of the KLC2 gene in patients with SPOAN syndrome causes overexpression of the gene
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