

KLC2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12241a

Specification

KLC2 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region WB, IHC-P, FC,E <u>Q9H0B6</u> <u>NP_073733.1</u> Human Rabbit Polyclonal Rabbit IgG 128-156

KLC2 Antibody (N-term) - Additional Information

Gene ID 64837

Other Names Kinesin light chain 2, KLC 2, KLC2

Target/Specificity

This KLC2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 128-156 amino acids from the N-terminal region of human KLC2.

Dilution WB~~1:1000 IHC-P~~1:10~50 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

KLC2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

KLC2 Antibody (N-term) - Protein Information

Name KLC2 (<u>HGNC:20716</u>)

Function Kinesin is a microtubule-associated force-producing protein that plays a role in organelle



transport. The light chain functions in coupling of cargo to the heavy chain or in the modulation of its ATPase activity (Probable). Through binding with PLEKHM2 and ARL8B, recruits kinesin-1 to lysosomes and hence direct lysosomes movement toward microtubule plus ends (PubMed:<u>22172677</u>).

Cellular Location

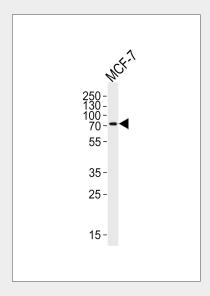
Cytoplasm, cytoskeleton. Lysosome membrane; Peripheral membrane protein; Cytoplasmic side

KLC2 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

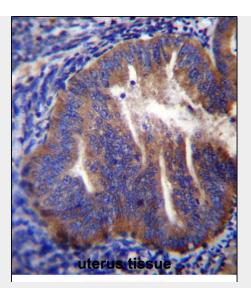
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

KLC2 Antibody (N-term) - Images

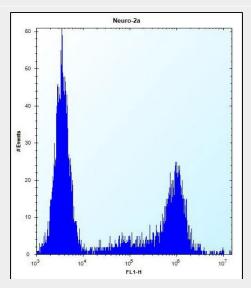


Western blot analysis of lysate from MCF-7 cell line, using KLC2 Antibody (N-term)(Cat. #AP12241a). AP12241a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.





KLC2 Antibody (N-term) (Cat. #AP12241a)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.



KLC2 Antibody (N-term) (Cat. #AP12241a) 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.

KLC2 Antibody (N-term) - Background

Kinesin is a molecular motor that generates ATP-dependent movement of vesicles and organelles along microtubules. Kinesin consists of 2 light chains, such as KLC2, and 2 heavy chains (see KIF5B; MIM 602809) in a 1:1 stoichiometric ratio (Rahman et al., 1998 [PubMed 9624122]).

KLC2 Antibody (N-term) - References

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) KLC2 Antibody (N-term) - Citations

• Role of Ostm1 cytosolic complex with Kinesin 5B in intracellular dispersion and trafficking.