

**KLC3 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP5349C****Specification**

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**KLC3 Antibody (Center) - Product Information**

Application	FC, IHC-P, WB,E
Primary Accession	<a href="#">Q6P597</a>
Other Accession	<a href="#">Q2TBO9</a> , <a href="#">NP_803136.2</a>
Reactivity	Human, Mouse
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	55364
Antigen Region	245-274

**KLC3 Antibody (Center) - Additional Information****Gene ID** 147700**Other Names**

Kinesin light chain 3, KLC2-like, kinesin light chain 2, KLC3, KLC2, KLC2L

**Target/Specificity**

This KLC3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 245-274 amino acids from the Central region of human KLC3.

**Dilution**

FC~~1:10~50

IHC-P~~1:50~100

WB~~1:1000

E~~Use at an assay dependent concentration.

**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**

KLC3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**KLC3 Antibody (Center) - Protein Information**

**Name** KLC3

**Synonyms** KLC2, KLC2L

**Function** Kinesin is a microtubule-associated force-producing protein that may play a role in organelle transport. Plays a role during spermiogenesis in the development of the sperm tail midpiece and in the normal function of spermatozoa (By similarity). May play a role in the formation of the mitochondrial sheath formation in the developing spermatid midpiece (By similarity).

**Cellular Location**

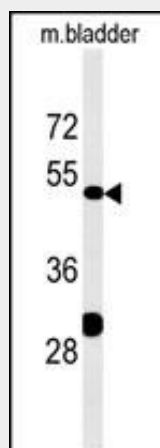
Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q68G30, ECO:0000250|UniProtKB:Q91W40}  
Mitochondrion {ECO:0000250|UniProtKB:Q91W40}. Note=In elongating spermatid tail midpiece, localized in outer dense fibers (ODFs) and associates with mitochondria. Also localizes to the manchette in elongating spermatids. {ECO:0000250|UniProtKB:Q68G30, ECO:0000250|UniProtKB:Q91W40}

**KLC3 Antibody (Center) - Protocols**

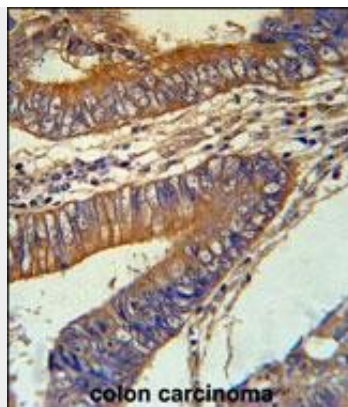
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

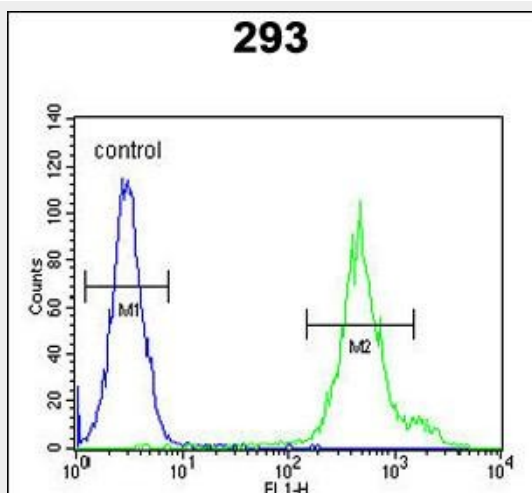
**KLC3 Antibody (Center) - Images**



KLC3 Antibody (Center) (Cat. #AP5349c) western blot analysis in mouse bladder tissue lysates (35ug/lane). This demonstrates the KLC3 antibody detected the KLC3 protein (arrow).



KLC3 Antibody (Center) (Cat. #AP5349c) immunohistochemistry analysis in formalin fixed and paraffin embedded human colon carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the KLC3 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



KLC3 Antibody (Center) (Cat. #AP5349c) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### KLC3 Antibody (Center) - Background

KLC3 encodes a member of the kinesin light chain gene family. Kinesins are molecular motors involved in the transport of cargo along microtubules, and are composed of two kinesin heavy chain (KHC) and two kinesin light chain (KLC) molecules. KLCs are thought to typically be involved in binding cargo and regulating kinesin activity. In the rat, a protein similar to this gene product is expressed in post-meiotic spermatids, where it associates with structural components of sperm tails and mitochondria.

### KLC3 Antibody (Center) - References

- Zhang, Y., et al. Dev. Biol. 275(1):23-33(2004)  
 Bhullar, B., et al. J. Biol. Chem. 278(18):16159-16168(2003)  
 Junco, A., et al. Biol. Reprod. 64(5):1320-1330(2001)