

#12313 Store at -20°C

KIFC1 Antibody



✓ 100 µl
(10 western blots)

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New 09/12

For Research Use Only. Not For Use In Diagnostic Procedures.

Applications W, IP Endogenous	Species Cross-Reactivity* H	Molecular Wt. 75 kDa	Source Rabbit**
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Background: Kinesin superfamily proteins (KIFs) are molecular motors that drive directional, microtubule-dependent intracellular transport of membrane-bound organelles and other macromolecules (e.g. proteins, nucleic acids). The intracellular transport functions of KIFs are fundamentally important for a variety of cellular functions, including mitotic and meiotic division, motility/migration, hormone and neurotransmitter release, and differentiation (1-4). Disruptions to KIF-mediated intracellular transport have been linked with a variety of pathologies, ranging from tumorigenesis to defects in higher order brain function, such as learning and memory (4-6).

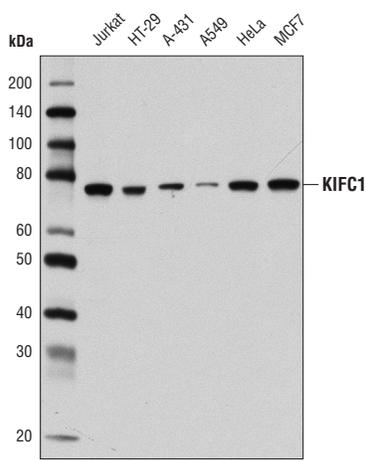
KIFC1/HSET is a minus-end directed KIF involved in the processing and movement of early endocytic vesicles (7,8), as well as microtubule crosslinking and spindle assembly (9,10).

Specificity/Sensitivity: KIFC1 Antibody recognizes endogenous levels of total KIFC1 protein.

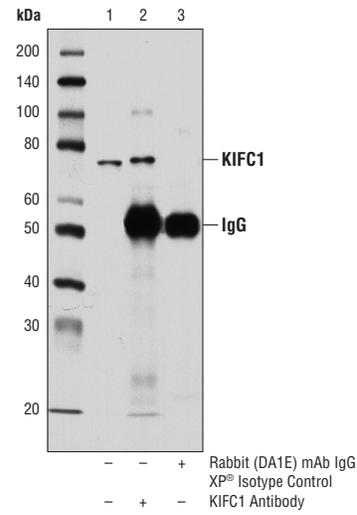
Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human KIFC1 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

- (1) Hirokawa, N. et al. (2009) *Nat Rev Mol Cell Biol* 10, 682-96.
- (2) Yu, Y. and Feng, Y.M. (2010) *Cancer* 116, 5150-60.
- (3) Park, J.J. et al. (2008) *Mol Endocrinol* 22, 989-1005.
- (4) Hirokawa, N. et al. (2010) *Neuron* 68, 610-38.
- (5) Yoshimura, Y. et al. (2010) *Mol Cell Biol* 30, 2206-19.
- (6) Hirokawa, N. and Noda, Y. (2008) *Physiol Rev* 88, 1089-118.
- (7) Nath, S. et al. (2007) *Mol Biol Cell* 18, 1839-49.
- (8) Zhu, C. et al. (2005) *Mol Biol Cell* 16, 3187-99.
- (9) Mountain, V. et al. (1999) *J Cell Biol* 147, 351-66.
- (10) Cai, S. et al. (2009) *Mol Biol Cell* 20, 1348-59.



Western blot analysis of extracts from various cell lines using KIFC1 Antibody.



Immunoprecipitation of KIFC1 from HeLa cell extracts using KIFC1 Antibody (lane 2) or Rabbit (DA1E) mAb IgG XP® Isotype Control #3900 (lane 3). Lane 1 is 10% input. Western blot was performed using KIFC1 Antibody.

Entrez-Gene ID #3833
Swiss-Prot Acc. #Q9BW19

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting 1:1000
Immunoprecipitation 1:100

For product specific protocols please see the web page for this product at www.cellsignaling.com.

Please visit www.cellsignaling.com for a complete listing of recommended complementary products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

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Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA—Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.