

Katanin p60 AL2 (C-16): sc-84854

BACKGROUND

Microtubules are polymers of α and β subunits that form the mitotic spindle and assist in the organization of membranous organelles during interphase. Katanin is a heterodimer complex that severs microtubules in an ATP-dependent manner. The severing of microtubules by the Katanin complex may promote reorganization of cellular microtubule arrays and release of microtubules from the centrosome following nucleation. The Katanin complex is composed of a 60 kDa subunit (Katanin p60 A1) and a 80 kDa accessory protein (Katanin p80 B1). Katanin p60 A1 is responsible for the severing and disassembly of microtubules, while Katanin p80 B1 targets the complex to the centrosome. Katanin p60 A1 and Katanin p80 B1 belong to the AAA ATPase family, which also includes the Katanin p60 A1-like proteins, Katanin p60 AL1 and Katanin p60 AL2.

REFERENCES

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- Karabay, A., Yu, W., Solowska, J.M., Baird, D.H. and Baas, P.W. 2004. Axonal growth is sensitive to the levels of Katanin, a protein that severs microtubules. *J. Neurosci.* 24: 5778-5788.

CHROMOSOMAL LOCATION

Genetic locus: KATNAL2 (human) mapping to 18q21.1.

SOURCE

Katanin p60 AL2 (C-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of Katanin p60 AL2 of human origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84854 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Katanin p60 AL2 (C-16) is recommended for detection of Katanin p60 AL2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Katanin p60 AL2 siRNA (h): sc-75365, Katanin p60 AL2 shRNA Plasmid (h): sc-75365-SH and Katanin p60 AL2 shRNA (h) Lentiviral Particles: sc-75365-V.

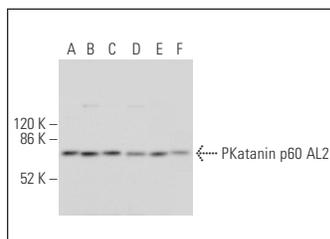
Molecular Weight of Katanin p60 AL2 isoforms: 61/53 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or IMR-32 cell lysate: sc-2409.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



PKatanin p60 AL2 (C-16): sc-84854. Western blot analysis of Katanin p60 AL2 expression in HeLa (A), Jurkat (B), IMR-32 (C), K-562 (D), HEK293 (E) and NTERA-2 cl.D1 (F) whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.