

CKAP2L (P-13): sc-242447

BACKGROUND

CKAP2 (cytoskeleton associated protein 2) is a cytoskeletal protein expressed in thymus and testis. Utilized during mitosis and involved in regulating functions of microtubules, CKAP2 also plays a role in cellular death and the cell cycle. Before mitosis, CKAP2 is expressed in the cell cycle between phases G₁ and S, and accumulates between phases S and G₂. During mitosis, when the anaphase promoting complex is activated, CKAP2 is degraded. The regulation of CKAP2 is essential for proper spindle functions and cytokinesis, and it is thought that CKAP2 function is mediated via phosphorylation and dephosphorylation. CKAP2L (cytoskeleton associated protein 2) is a 745 amino acid protein that shares homology with CKAP2 and belongs to the CKAP2 family. Existing as two alternatively spliced isoforms, CKAP2L is encoded by a gene that maps to human chromosome 2q13.

REFERENCES

1. Udina, I.G., Baranova, A.V., Kompani tsev, A.A. and Sulimova, G.E. 2001. Evolutionarily-conserved gene CKAP2, located in region 13q14.3 of the human genome, is frequently rearranged in various tumors. *Genetika* 37: 120-123.
2. Rakhmanaliev, E.R., Klimov, E.A., Kompaniitsev, A.A. and Sulimova, G.E. 2002. The structure of the human oncogenesis-associated CKAP2 (LB1) gene. *Mol. Biol.* 36: 985-989.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 611569. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Bae, C.D., Sung, Y.S., Jeon, S.M., Suh, Y., Yang, H.K., Kim, Y.I., Park, K.H., Choi, J., Ahn, G. and Park, J. 2003. Up-regulation of cytoskeletal-associated protein 2 in primary human gastric adenocarcinomas. *J. Cancer Res. Clin. Oncol.* 129: 621-630.
5. Tsuchihara, K., Lapin, V., Bakal, C., Okada, H., Brown, L., Hirota-Tsuchihara, M., Zaugg, K., Ho, A., Itie-Youten, A., Harris-Brandts, M., Rottapel, R., Richardson, C.D., Benchimol, S. and Mak, T.W. 2005. Ckap2 regulates aneuploidy, cell cycling, and cell death in a p53-dependent manner. *Cancer Res.* 65: 6685-6691.

CHROMOSOMAL LOCATION

Genetic locus: CKAP2L (human) mapping to 2q13; Ckap2l (mouse) mapping to 2 F1.

SOURCE

CKAP2L (P-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CKAP2L of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-242447 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CKAP2L (P-13) is recommended for detection of CKAP2L of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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); non cross-reactive with CKAP2.

Suitable for use as control antibody for CKAP2L siRNA (h): sc-94694, CKAP2L siRNA (m): sc-142353, CKAP2L shRNA Plasmid (h): sc-94694-SH, CKAP2L shRNA Plasmid (m): sc-142353-SH, CKAP2L shRNA (h) Lentiviral Particles: sc-94694-V and CKAP2L shRNA (m) Lentiviral Particles: sc-142353-V.

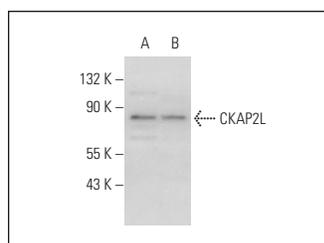
Molecular Weight of CKAP2L: 84 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or NIH/3T3 whole cell lysate: sc-2210.

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



CKAP2L (P-13): sc-242447. Western blot analysis of CKAP2L expression in K-562 (A) and NIH/3T3 (B) whole cell lysates.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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