

kleisin β (H-170): sc-366257

BACKGROUND

Chromosome formation and subsequent function require the activity of two condensin complexes, namely condensin I and condensin II, both of which are crucial for proper mitotic chromosome assembly and segregation. Kleisin β , also known as NCAPH2 (non-SMC condensin II complex, subunit H2) or CAPH2, is a 605 amino acid protein that localizes to the nucleus and is specifically distributed along the arms of assembled chromosomes. Existing as a component of the condensin II complex, kleisin β functions as a regulatory protein that assists in establishing mitotic chromosome architecture, possibly by providing an increased level of organization and rigidity to formed chromosomes. In response to DNA damage, kleisin β is subject to phosphorylation by ATM or ATR. Multiple isoforms of kleisin β exist due to alternative splicing events.

REFERENCES

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3. Onn, I., Aono, N., Hirano, M. and Hirano, T. 2007. Reconstitution and subunit geometry of human condensin complexes. *EMBO J.* 26: 1024-1034.
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5. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 611230. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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CHROMOSOMAL LOCATION

Genetic locus: NCAPH2 (human) mapping to 22q13.33; Ncaph2 (mouse) mapping to 15 E3.

SOURCE

kleisin β (H-170) is a rabbit polyclonal antibody raised against amino acids 437-606 mapping at the C-terminus of kleisin β of human origin.

PRODUCT

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

RESEARCH USE

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

APPLICATIONS

kleisin β (H-170) is recommended for detection of kleisin β of mouse, rat and 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).

kleisin β (H-170) is also recommended for detection of kleisin β in additional species, including canine.

Suitable for use as control antibody for kleisin β siRNA (h): sc-75388, kleisin β siRNA (m): sc-146495, kleisin β shRNA Plasmid (h): sc-75388-SH, kleisin β shRNA Plasmid (m): sc-146495-SH, kleisin β shRNA (h) Lentiviral Particles: sc-75388-V and kleisin β shRNA (m) Lentiviral Particles: sc-146495-V.

Molecular Weight of kleisin β : 90 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.