

CAP-G2 (C-12): sc-160196

BACKGROUND

The condensin complex plays a role in the resolution and segregation of sister chromatids during mitosis and some aspects of mitotic chromosome assembly. Cdc2 phosphorylation of the complex leads to its activation and its association with chromosome arms and condensation. CAP-G2 (chromosome-associated protein G2), also known as condensin-2 complex subunit G2, NCAPG2 (non-SMC condensin II complex, subunit G2), MTB or LUZP5 (leucine zipper protein 5), is a 1,143 amino acid nuclear protein and component of the condensin-2 complex, which plays a role in creating rigidity at the chromatid axis. Existing as two alternatively spliced isoforms, CAP-G2 contains one HEAT repeat and is encoded by a gene that maps to human chromosome 7q36.3.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NCAPG2 (human) mapping to 7q36.3; Ncapg2 (mouse) mapping to 12 F2.

SOURCE

CAP-G2 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CAP-G2 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.

RESEARCH USE

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

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-160196 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CAP-G2 (C-12) is recommended for detection of CAP-G2 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).

Suitable for use as control antibody for CAP-G2 siRNA (h): sc-89745, CAP-G2 siRNA (m): sc-142000, CAP-G2 shRNA Plasmid (h): sc-89745-SH, CAP-G2 shRNA Plasmid (m): sc-142000-SH, CAP-G2 shRNA (h) Lentiviral Particles: sc-89745-V and CAP-G2 shRNA (m) Lentiviral Particles: sc-142000-V.

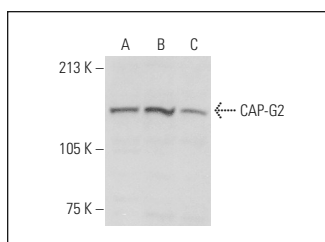
Molecular Weight of CAP-G2: 131 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

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



CAP-G2 (C-12): sc-160196. Western blot analysis of CAP-G2 expression in HeLa (A), Jurkat (B) and K-562 (C) nuclear extracts.

PROTOCOLS

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