

Gcap14 (C-4): sc-393718

BACKGROUND

Gcap14, also known as FAM190B (family with sequence similarity 190, member B), is an 834 amino acid protein that exists as three alternatively spliced isoforms and belongs to the FAM190 family. The gene encoding Gcap14 maps to human chromosome 10q23.1. Spanning nearly 135 million base pairs, chromosome 10 makes up approximately 4.5% of total DNA in cells and encodes nearly 1,200 genes. Several protein-coding genes, including those that encode for chemokines, cadherins, excision repair proteins, early growth response factors (Egrs) and fibroblast growth receptors (FGFRs), are located on chromosome 10. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie-Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

REFERENCES

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- Deloukas, P., et al. 2000. Report of the third international workshop on human chromosome 10 mapping and sequencing 1999. *Cytogenet. Cell Genet.* 90: 1-12.
- Gilbert, F. 2001. *Chromosome 10. Genet. Test.* 5: 69-82.
- Berger, P., et al. 2002. Molecular cell biology of Charcot-Marie-Tooth disease. *Neurogenetics* 4: 1-15.
- Teresi, R.E., et al. 2007. Cowden syndrome-affected patients with PTEN promoter mutations demonstrate abnormal protein translation. *Am. J. Hum. Genet.* 81: 756-767.
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- Yin, Y. and Shen, W.H. 2008. PTEN: a new guardian of the genome. *Oncogene* 27: 5443-5453.

CHROMOSOMAL LOCATION

Genetic locus: CCSE22 (human) mapping to 10q23.1; Gcap14 (mouse) mapping to 14 B.

SOURCE

Gcap14 (C-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 786-817 near the C-terminus of Gcap14 of human origin.

PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-393718 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

Gcap14 (C-4) is recommended for detection of Gcap14 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 Gcap14 siRNA (h): sc-90665, Gcap14 siRNA (m): sc-145355, Gcap14 shRNA Plasmid (h): sc-90665-SH, Gcap14 shRNA Plasmid (m): sc-145355-SH, Gcap14 shRNA (h) Lentiviral Particles: sc-90665-V and Gcap14 shRNA (m) Lentiviral Particles: sc-145355-V.

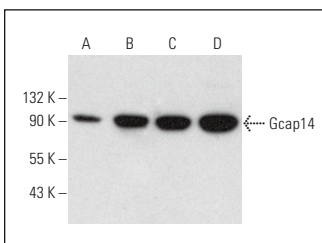
Molecular Weight of Gcap14 isoforms: 93/63/117 kDa.

Positive Controls: HT-1080 whole cell lysate: sc-364183, Gcap14 (h): 293T Lysate: sc-114871 or HeLa whole cell lysate: sc-2200.

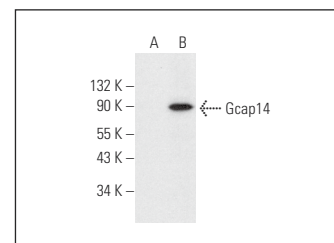
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Gcap14 (C-4): sc-393718. Western blot analysis of Gcap14 expression in HeLa (A), U-87 MG (B), HT-1080 (C) and MDA-MB-231 (D) whole cell lysates.



Gcap14 (C-4): sc-393718. Western blot analysis of Gcap14 expression in non-transfected: sc-117752 (A) and human Gcap14 transfected: sc-114871 (B) 293T 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 for detailed protocols and support products.