

GCC2 (E-20): sc-242898

BACKGROUND

GCC2 (GRIP and coiled-coil domain containing 2), also known as REN53, is a 1,583 amino acid protein that localizes to both the cytoplasm and the membrane of the Golgi apparatus and contains one GRIP domain. Expressed ubiquitously, GCC2 exists as two alternatively spliced isoforms and is thought to be involved in the maintenance of Golgi structure, as well as CD-MPR recycling and function. The gene encoding GCC2 maps to human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene, while the lipid metabolic disorder sitosterolemia is associated with defects in the ABCG5 and ABCG8 genes. Additionally, an extremely rare recessive genetic disorder, Alström syndrome, is caused by mutations in the ALMS1 gene, which maps to chromosome 2.

REFERENCES

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5. Reddy, J.V., Burguete, A.S., Sridevi, K., Ganley, I.G., Nottingham, R.M. and Pfeffer, S.R. 2006. A functional role for the GCC185 golgin in mannose 6-phosphate receptor recycling. *Mol. Biol. Cell* 17: 4353-4363.
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CHROMOSOMAL LOCATION

Genetic locus: GCC2 (human) mapping to 2q12.3; Gcc2 (mouse) mapping to 10 B4.

SOURCE

GCC2 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GCC2 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.

Blocking peptide available for competition studies, sc-242898 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GCC2 (E-20) is recommended for detection of GCC2 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); non cross-reactive with GCC1.

GCC2 (E-20) is also recommended for detection of GCC2 in additional species, including equine and canine.

Suitable for use as control antibody for GCC2 siRNA (h): sc-94505, GCC2 siRNA (m): sc-145358, GCC2 shRNA Plasmid (h): sc-94505-SH, GCC2 shRNA Plasmid (m): sc-145358-SH, GCC2 shRNA (h) Lentiviral Particles: sc-94505-V and GCC2 shRNA (m) Lentiviral Particles: sc-145358-V.

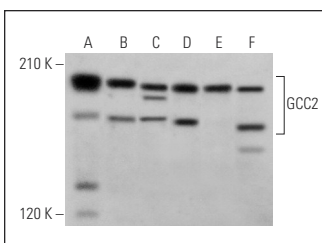
Molecular Weight of GCC2: 175 kDa.

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

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



GCC2 (E-20): sc-242898. Western blot analysis of GCC2 expression in HeLa (A), HEK293 (B), Jurkat (C), K-562 (D), Hep G2 (E) and NIH/3T3 (F) 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.