

GCM1 (C-18): sc-69407

BACKGROUND

GCM1 (glial cells missing homolog 1), also known as GCMA or hGCMA, is a 436 amino acid human homolog of the *Drosophila* glial cells missing protein (gcm). Localized to the nucleus and expressed specifically in placenta, GCM1 functions as a transcription factor that binds the novel sequence (A/G)CCCG-CAT and, through this binding, regulates placental development. Additionally, GCM1 is thought to regulate syncytin SU-mediated trophoblastic fusion, an event that produces syncytiotrophoblast structures which, in turn, function as the outermost covering of the placental villi. GCM1 contains one N-terminal GCM (glial cell missing) DNA-binding domain, a conserved 150 amino acid residue that conveys DNA-binding activity for a variety of transcription factors involved in developmental processes.

REFERENCES

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3. Yamada, K., et al. 2000. Genomic organization, chromosomal localization, and the complete 22 kb DNA sequence of the human GCMA/ GCM1, a placenta-specific transcription factor gene. Biochem. Biophys. Res. Commun. 278: 134-139.
4. Yu, C., et al. 2002. GCMA regulates the syncytin-mediated trophoblastic fusion. J. Biol. Chem. 277: 50062-50068.
5. Baczyk, D., et al. 2004. Complex patterns of GCM1 mRNA and protein in villous and extravillous trophoblast cells of the human placenta. Placenta 25: 553-559.
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CHROMOSOMAL LOCATION

Genetic locus: GCM1 (human) mapping to 6p12.1.

SOURCE

GCM1 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of GCM1 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-69407 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-69407 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GCM1 (C-18) is recommended for detection of GCM1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

GCM1 (C-18) is also recommended for detection of GCM1 in additional species, including porcine.

Suitable for use as control antibody for GCM1 siRNA (h): sc-75117, GCM1 shRNA Plasmid (h): sc-75117-SH and GCM1 shRNA (h) Lentiviral Particles: sc-75117-V.

GCM1 (C-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of GCM1: 49 kDa.

Positive Controls: FHs 173We cell lysate: sc-2417.

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) 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.

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.



Try **GCM1 (R-06): sc-101173**, our highly recommended monoclonal alternative to GCM1 (C-18).