SANTA CRUZ BIOTECHNOLOGY, INC.

GCM1 (N-16): sc-69411



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.

CHROMOSOMAL LOCATION

Genetic locus: GCM1 (human) mapping to 6p12.1; Gcm1 (mouse) mapping to 9 E1.

SOURCE

GCM1 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of GCM1 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-69411 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-69411 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

GCM1 (N-16) is recommended for detection of GCM1 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).

GCM1 (N-16) is also recommended for detection of GCM1 in additional species, including canine.

Suitable for use as control antibody for GCM1 siRNA (h): sc-75117, GCM1 siRNA (m): sc-75118, GCM1 shRNA Plasmid (h): sc-75117-SH, GCM1 shRNA Plasmid (m): sc-75118-SH, GCM1 shRNA (h) Lentiviral Particles: sc-75117-V and GCM1 shRNA (m) Lentiviral Particles: sc-75118-V.

GCM1 (N-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of GCM1: 49 kDa.

Positive Controls: NIH/3T3 nuclear extract: sc-2138, HeLa whole cell lysate: sc-2200 or GCM1 (m): 293T Lysate: sc-120453.

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





GCM1 (N-16): sc-69411. Western blot analysis of GCM1 expression in Hep G2 (Å), HeLa (B), HEK293 (C) and Jurkat (D) whole cell lysates and K-562 (E) and NIH/3T3 (F) nuclear extracts.

GCM1 (N-16): sc-69411. Western blot analysis of GCM1 expression in non-transfected 293T: sc-117752 (A), mouse GCM1 transfected 293T: sc-120453 (B) and JAR (C) 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.

PROTOCOLS

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

MONOS Satisfation Guaranteed Try GCM1 (R-06): sc-101173, our highly recommended monoclonal aternatives to GCM1 (N-16).