

GCM2 (M-18): sc-79493

BACKGROUND

Glial cells missing homolog 2 (GCM2), also known as Chorion-specific transcription factor GCMb, is a 506 amino acid nuclear protein. GCM2 is a transcription factor that acts as an essential regulator of parathyroid development. GCM2 is also thought to mediate the effect of calcium on parathyroid hormone expression and secretion in parathyroid cells. GCM2 contains one N-terminal GCM domain, which has DNA binding activity. Mutations of the gene that encodes GCM2 are associated with hypoparathyroidism, an autosomal recessive condition characterized by hypocalcemia and hyperphosphatemia.

REFERENCES

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- Thomee, C., et al. 2005. GCMB mutation in familial isolated hypoparathyroidism with residual secretion of parathyroid hormone. *J. Clin. Endocrinol. Metab.* 90: 2487-2492.
- Baumber, L., et al. 2005. Identification of a novel mutation disrupting the DNA binding activity of GCM2 in autosomal recessive familial isolated hypoparathyroidism. *J. Med. Genet.* 42: 443-448.
- Liu, Z., et al. 2007. Gcm2 is required for the differentiation and survival of parathyroid precursor cells in the parathyroid/thymus primordia. *Dev. Biol.* 305: 333-346.
- Soustelle, L. and Giangrande, A. 2007. Novel gcm-dependent lineages in the postembryonic nervous system of *Drosophila melanogaster*. *Dev. Dyn.* 236: 2101-2108.
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CHROMOSOMAL LOCATION

Genetic locus: Gcm2 (mouse) mapping to 13 A3.3.

SOURCE

GCM2 (M-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of GCM2 of mouse origin.

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-79493 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-79493 X, 200 µg/0.1 ml.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

GCM2 (M-18) is recommended for detection of GCM2 of mouse and rat 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).

Suitable for use as control antibody for GCM2 siRNA (m): sc-75120, GCM2 shRNA Plasmid (m): sc-75120-SH and GCM2 shRNA (m) Lentiviral Particles: sc-75120-V.

GCM2 (M-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of GCM2: 65-70 kDa.

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.

RESEARCH USE

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

PROTOCOLS

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