

# GCM2 (P-17): sc-79495

## 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

- Kebebew, E., et al. 2004. GCMB gene, a master regulator of parathyroid gland development, expression, and regulation in hyperparathyroidism. *Surgery* 136: 1261-1266.
- 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.
- Maret, A., et al. 2008. Analysis of the GCM2 gene in isolated hypoparathyroidism: a molecular and biochemical study. *J. Clin. Endocrinol. Metab.* 93: 1426-1432.

## CHROMOSOMAL LOCATION

Genetic locus: GCM2 (human) mapping to 6p24.2; Gcm2 (mouse) mapping to 13 A3.3.

## SOURCE

GCM2 (P-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-79495 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-79495 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

GCM2 (P-17) is recommended for detection of GCM2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

GCM2 (P-17) is also recommended for detection of GCM2 in additional species, including equine.

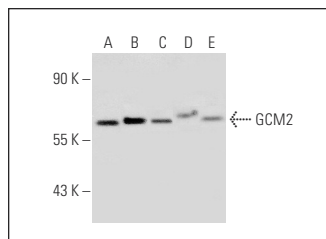
Suitable for use as control antibody for GCM2 siRNA (h): sc-75119, GCM2 siRNA (m): sc-75120, GCM2 shRNA Plasmid (h): sc-75119-SH, GCM2 shRNA Plasmid (m): sc-75120-SH, GCM2 shRNA (h) Lentiviral Particles: sc-75119-V and GCM2 shRNA (m) Lentiviral Particles: sc-75120-V.

GCM2 (P-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

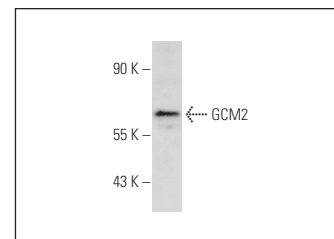
Molecular Weight of GCM2: 65-70 kDa.

Positive Controls: F9 cell lysate: sc-2245, EOC 20 whole cell lysate: sc-364187 or mouse testis extract: sc-2405.

## DATA



GCM2 (P-17): sc-79495. Western blot analysis of GCM2 expression in F9 (A), AMJ2-C8 (B), EOC 20 (C) and BC3H1 (D) whole cell lysates and mouse testis tissue extract (E).



GCM2 (P-17): sc-79495. Western blot analysis of GCM2 expression in HEK293 whole cell lysate.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **GCM2 (C-5): sc-390603** or **GCM2 (C-2): sc-514736**, our highly recommended monoclonal alternatives to GCM2 (P-17).