

# Rabbit Anti-GCM2 antibody

# SL13314R

Product Name:	GCM2
Chinese Name:	绒毛膜特异性转录因子GCM2抗体
Alias:	Chorion-specific transcription factor GCMb; GCM motif protein 2; GCMb; Glial cells missing homolog 2; glial cells missing homolog b; GCM2 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Horse, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	57kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human GCM2:61-160/506
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	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.

# **Function:**

Gcm2, a mouse ortholog of the Drosophila Glial Cells Missing gene, is expressed in the parathyroid-specific domains in the 3rd pouches from E9.5. The null mutation of Gcm2 causes aparathyroidism in the fetal and adult mouse and has been proposed to be a master regulator for parathyroid development. During Drosophila embryogenesis Gcm2 plays a crucial role in promoting glial cell differentiation.

### **Subcellular Location:**

Nuclear.

#### DISEASE:

Defects in GCM2 are a cause of familial isolated hypoparathyroidism (FIH) [MIM:146200]; also known as autosomal dominant hypoparathyroidism or autosomal dominant hypocalcemia. FIH is characterized by hypocalcemia and hyperphosphatemia due to inadequate secretion of parathyroid hormone. Symptoms are seizures, tetany and cramps. An autosomal recessive form of FIH also exists.

## Similarity:

Contains 1 GCM DNA-binding domain.

### **SWISS:**

O75603

#### Gene ID:

9247

#### **Database links:**

Entrez Gene: 9247Human

Omim: 603716Human

SwissProt: O75603Human

### **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.