

## **GATA4** Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1404b

### **Specification**

## **GATA4 Antibody (C-term) - Product Information**

Application WB, FC,E Primary Accession P43694

Other Accession <u>P46152</u>, <u>Q08369</u>, <u>P70005</u>

Reactivity Human

Predicted Xenopus, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 44565
Antigen Region 298-328

# GATA4 Antibody (C-term) - Additional Information

#### **Gene ID 2626**

#### **Other Names**

Transcription factor GATA-4, GATA-binding factor 4, GATA4

#### Target/Specificity

This GATA4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 298-328 amino acids from the C-terminal region of human GATA4.

#### **Dilution**

WB~~1:1000 FC~~1:10~50

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

### **Storage**

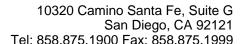
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

GATA4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### GATA4 Antibody (C-term) - Protein Information

## Name GATA4





**Function** Transcriptional activator that binds to the consensus sequence 5'-AGATAG-3' and plays a key role in cardiac development and function (PubMed:24000169, PubMed:27984724, PubMed:35182466). In cooperation with TBX5, it binds to cardiac super-enhancers and promotes cardiomyocyte gene expression, while it down-regulates endocardial and endothelial gene expression (PubMed:27984724). Involved in bone morphogenetic protein (BMP)-mediated induction of cardiac-specific gene expression. Binds to BMP response element (BMPRE) DNA sequences within cardiac activating regions (By similarity). Acts as a transcriptional activator of ANF in cooperation with NKX2-5 (By similarity). Promotes cardiac myocyte enlargement (PubMed:20081228). Required during testicular development (PubMed:21220346). May play a role in sphingolipid signaling by regulating the expression of sphingosine-1- phosphate degrading enzyme, sphingosine-1-phosphate lyase (PubMed:15734735).

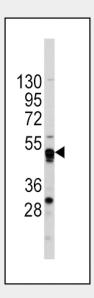
**Cellular Location** Nucleus

## **GATA4 Antibody (C-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

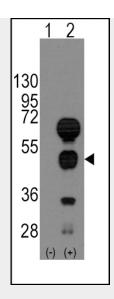
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## GATA4 Antibody (C-term) - Images

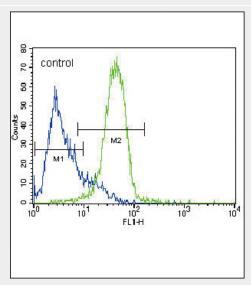


Western blot analysis of anti-GATA4 Antibody (C-term) (Cat.#AP1404b) in CEM cell line lysates (35ug/lane). GATA4(arrow) was detected using the purified Pab.





Western blot analysis of GATA4 (arrow) using rabbit polyclonal GATA4 Antibody (C-term) (Cat.#AP1404b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the GATA4 gene (Lane 2) (Origene Technologies).



GATA4 Antibody (C-term) (Cat. #AP1404b) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# GATA4 Antibody (C-term) - Background

GATA4 is a member of the GATA family of zinc-finger transcription factors. Members of this family recognize the GATA motif which is present in the promoters of many genes. This protein is thought to regulate genes involved in embryogenesis and in myocardial differentiation and function. Mutations in the gene encoding GATA4 have been associated with cardiac septal defects.

### GATA4 Antibody (C-term) - References

Rajagopal, S.K., J. Mol. Cell. Cardiol. 43 (6), 677-685 (2007) Philips, A.S., J. Biol. Chem. 282 (34), 24915-24927 (2007)