

### **GATA-4 Polyclonal Antibody**

**Catalog # AP70046** 

### **Specification**

# **GATA-4 Polyclonal Antibody - Product Information**

Application WB, IHC-P Primary Accession P43694

Reactivity Human, Mouse, Rat

Host Rabbit Clonality Polyclonal

# **GATA-4 Polyclonal Antibody - Additional Information**

**Gene ID** 2626

#### **Other Names**

GATA4; Transcription factor GATA-4; GATA-binding factor 4

#### **Dilution**

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.

IHC-P~~N/A

#### **Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

### **Storage Conditions**

-20°C

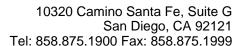
### **GATA-4 Polyclonal Antibody - Protein Information**

#### 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:<a

href="http://www.uniprot.org/citations/24000169" target="\_blank">24000169</a>, PubMed:<a href="http://www.uniprot.org/citations/27984724" target="\_blank">27984724</a>, PubMed:<a href="http://www.uniprot.org/citations/35182466" target="\_blank">35182466</a>). 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:<a href="http://www.uniprot.org/citations/27984724" target="\_blank">27984724</a>). 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:<a href="http://www.uniprot.org/citations/20081228" target="\_blank">20081228</a>). Required during testicular development (PubMed:<a href="http://www.uniprot.org/citations/21220346</a>). May play a





role in sphingolipid signaling by regulating the expression of sphingosine-1- phosphate degrading enzyme, sphingosine-1-phosphate lyase (PubMed:<a href="http://www.uniprot.org/citations/15734735" target="\_blank">15734735</a>).

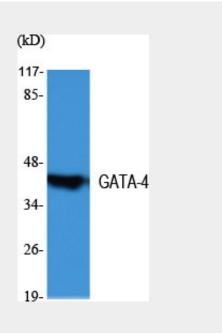
**Cellular Location** Nucleus

# **GATA-4 Polyclonal Antibody - Protocols**

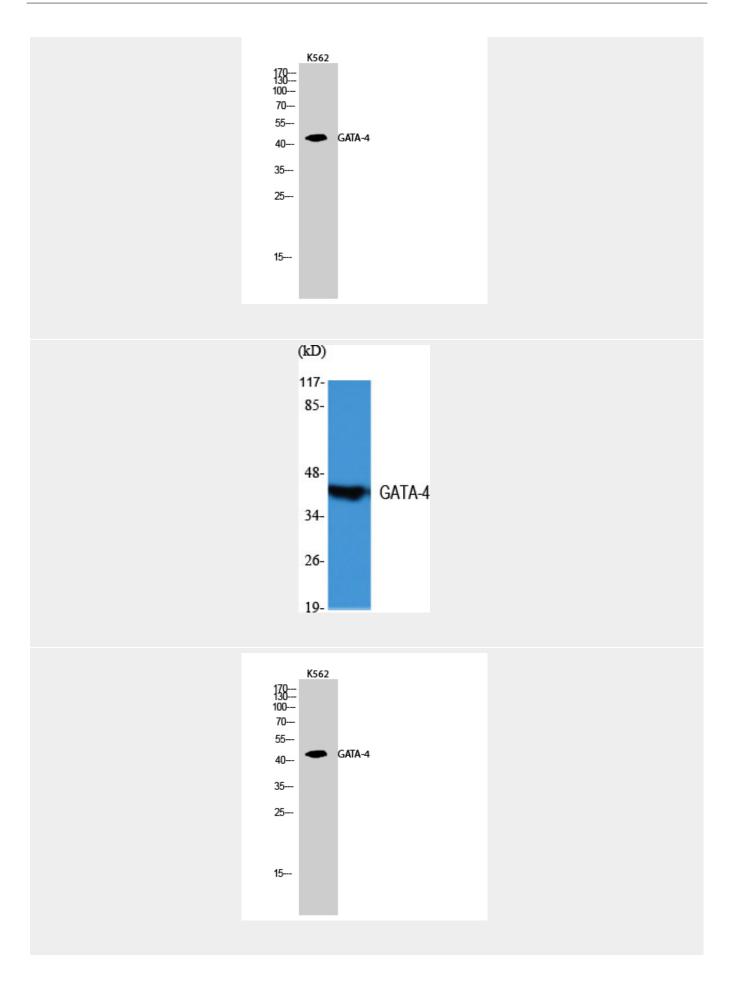
Provided below are standard protocols that you may find useful for product applications.

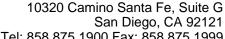
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

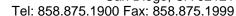
# **GATA-4 Polyclonal Antibody - Images**













# **GATA-4 Polyclonal Antibody - Background**

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). In cooperation with TBX5, it binds to cardiac super-enhancers and promotes cardiomyocyte gene expression, while it downregulates 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, spingosine-1-phosphate lyase (PubMed:15734735).