

# **GATA-4 Polyclonal Antibody**

Catalog # AP70044

### **Product Information**

**Application** WB, IHC-P, IF **Primary Accession** P43694

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW44565

#### **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.

Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other

applications. IHC-P~~N/A IF~~1:50~200

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

azide.

Storage Conditions -20°C

#### **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: <u>24000169</u>, PubMed: <u>27984724</u>, PubMed: <u>35182466</u>). 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: <u>27984724</u>). 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,

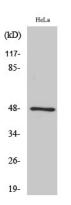
sphingosine-1-phosphate lyase (PubMed: 15734735).

Cellular Location Nucleus

## **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).

## **Images**



Western Blot analysis of various cells using GATA-4 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.