

**Anti-GATA4 (MOUSE) Monoclonal Antibody**  
**GATA4 Antibody**  
**Catalog # ASR4289****Specification**

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**Anti-GATA4 (MOUSE) Monoclonal Antibody - Product Information**

Host	Mouse
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human
Clonality	Monoclonal
Application	WB, E, I, LCI
Application Note	Anti-GATA4 antibody has been tested by ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 44 kDa in size corresponding to GATA4 by western blotting in the appropriate cell lysate or extract.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	GATA4 protein A purified antibody was prepared in mice by repeated immunizations with a recombinant protein corresponding to the first 100 amino acids of human GATA4 protein.
Preservative	0.01% (w/v) Sodium Azide

**Anti-GATA4 (MOUSE) Monoclonal Antibody - Additional Information****Gene ID** 2626**Other Names**  
2626**Purity**

Anti-GATA4 was purified from concentrated tissue culture supernatant Protein A chromatography. A BLAST analysis was used to suggest reactivity with mouse and rat GATA4 based on a 93% homology. Cross-reactivity with GATA4 from other sources has not been determined.

**Storage Condition**

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

## Anti-GATA4 (MOUSE) Monoclonal 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" target="\_blank">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

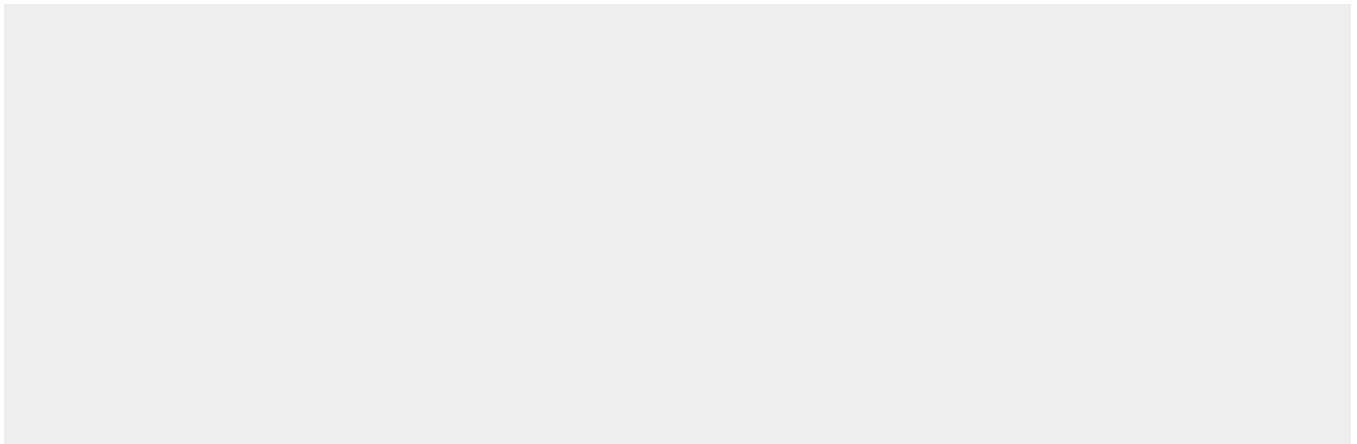
Nucleus

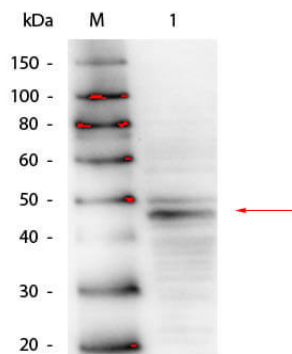
## Anti-GATA4 (MOUSE) Monoclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-GATA4 (MOUSE) Monoclonal Antibody - Images





Western Blot of Mouse anti-GATA4 Antibody. Lane 1: CCRF-CEM Lysate. Load: 25  $\mu$ g per lane. Primary antibody: GATA-4 antibody at 1:500 overnight at 4°C. Secondary antibody: anti-mouse IgG HRP antibody at 1:40,000 for 30 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: 44.5 kDa, 44.5 kDa for GATA4.

#### **Anti-GATA4 (MOUSE) Monoclonal Antibody - Background**

GATA4, also known as GATA-binding factor 4, acts in cooperation with NKX2-5 as a transcriptional activator of ANF. It binds to the consensus sequence 5'-AGATAG-3' on DNA. GATA4 is critical for the enlargement of cardiac myocytes. Mutations in GATA4 have been linked with congenital heart malfunctions and malformations. Anti-GATA4 antibody is ideal for researchers interested in developmental biology, stem cell research, cell growth and cancer research.