

DATASHEET

GATA4 Rabbit Polyclonal Antibody

CAT. NO. APA08618

KEY FEATURES

| | | | |
|---------------|---|---------------|---------------------|
| Target | GATA4 | Source / Host | Rabbit |
| Reactivity | Human, Mouse, Rat, Dog, Pig | Clonality | Polyclonal |
| Applications | WB, IHC, IF/ICC | Conjugation | Unconjugated |
| Form / Buffer | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. | | Storage at -20°C |

BACKGROUND

Transcriptional activator that binds to the consensus sequence 5'-AGATAG-3' and plays a key role in cardiac development and function . In cooperation with TBX5, it binds to cardiac super-enhancers and promotes cardiomyocyte gene expression, while it down-regulates endocardial and endothelial gene expression . 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 . Acts as a transcriptional activator of ANF in cooperation with NKX2-5 . Promotes cardiac myocyte enlargement . Required during testicular development . May play a role in sphingolipid signaling by regulating the expression of sphingosine-1-phosphate degrading enzyme, sphingosine-1-phosphate lyase .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

| | |
|--------|----------------|
| WB | 1:500 - 1:1000 |
| IHC | 1:100 - 1:200 |
| IF/ICC | 1:100 - 1:500 |

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

| | |
|-------------------|--|
| Description | Rabbit polyclonal antibody to GATA4 |
| Specificity | Recognizes endogenous levels of GATA4 protein. |
| Antibody Type | Primary antibody |
| Immunogen | KLH-conjugated synthetic peptide encompassing a sequence within the center region of human GATA4. The exact sequence is proprietary. |
| Purification | The antibody was purified by immunogen affinity chromatography. |
| Molecular Weight | Predicted: 44 kD; Observed: 55 kD |
| Form/Buffer | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |
| Alternative Names | Transcription factor GATA-4; GATA-binding factor 4 |
| Gene Symbol | GATA4 |
| Entrez Gene | 2626(Human); 14463(Mouse); 54254(Rat) |
| SwissProt | P43694(Human); Q08369(Mouse); P46152(Rat) |

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

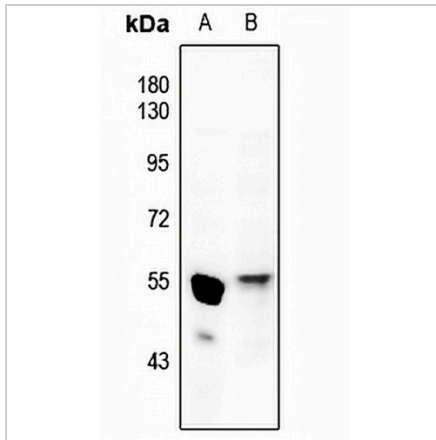
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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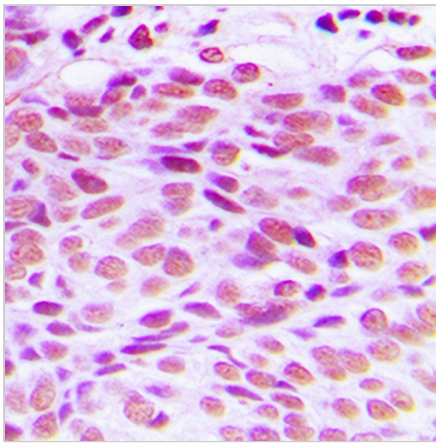
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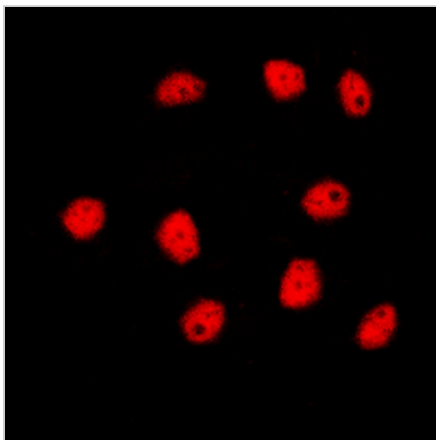
DATA



Western blot analysis of GATA4 expression in rat testis (A), HeLa (B) whole cell lysates. (Predicted band size: 44 kD; Observed band size: 55 kD)



Immunohistochemical analysis of GATA4 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of GATA4 staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.