

# Rabbit Anti-phospho-GATA4 (Ser262) antibody

SL6879R

Product Name:	phospho-GATA4 (Ser262)
Chinese Name:	磷酸化GATABinding protein4抗体
Alias:	GATA4 (phospho S262); p-GATA-4(Ser 262); p-GATA-4(Ser262); GATA binding factor 4; GATA 4; GATA4; GATA-4; Transcription factor GATA-4; GATA-binding factor 4; Gata4; GATA4_HUMAN; GATA-binding factor 4.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	49kDa 🥥
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human GATA4 around the phosphorylation site of Ser262:RL(p-S)AS
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Members of the GATA family share a conserved zinc finger DNA-binding domain and are capable of binding the WGATAR consensus sequence. GATA-1 is erythroid- specific and is responsible for the regulated transcription of erythroid genes. It is an essential component in the generation of the erythroid lineage. GATA-2 is expressed in

embryonic brain and liver, HeLa and endothelial cells, as well as in erythroid cells. Studies with a modified GATA consensus sequence, AGATCTTA, have shown that GATA-2 and GATA-3 recognize this mutated consensus while GATA-1 has poor recognition of this sequence. This indicates broader regulatory capabilities of GATA-2 and GATA-3 than GATA-1. GATA-3 is highly expressed in T lymphocytes. GATA-4, GATA-5 and GATA-6 comprise a subfamily of transcription factors. Both GATA-4 and GATA-6 are found in heart, pancreas and ovary; lung and liver tissues exhibit GATA-6, but not GATA-4 expression. GATA-5 expression has been observed in differentiated heart and gut tissues and is present throughout the course of development in the heart. Although expression patterns of the various GATA transcription factors may overlap, it is not yet apparent how the GATA factors are able to discriminate in binding their appropriate target sites.

#### **Function:**

Transcriptional activator. Binds to the consensus sequence 5'-AGATAG-3'. Acts as a transcriptional activator of ANF in cooperation with NKX2-5 (By similarity). Promotes cardiac myocyte enlargement.

#### Subunit:

Interacts with ZNF260 (By similarity). Interacts with the homeobox domain of NKX2-5 through its C-terminal zinc finger. Also interacts with JARID2 which represses its ability to activate transcription of ANF. Interacts with NFATC4 and LMCD1 (By similarity). Forms a complex made of CDK9, CCNT1/cyclin-T1, EP300 and GATA4 that stimulates hypertrophy in cardiomyocytes.

### Subcellular Location:

Nucleus.

# Post-translational modifications:

Methylation at Lys-300 attenuates transcriptional activity.

## **DISEASE:**

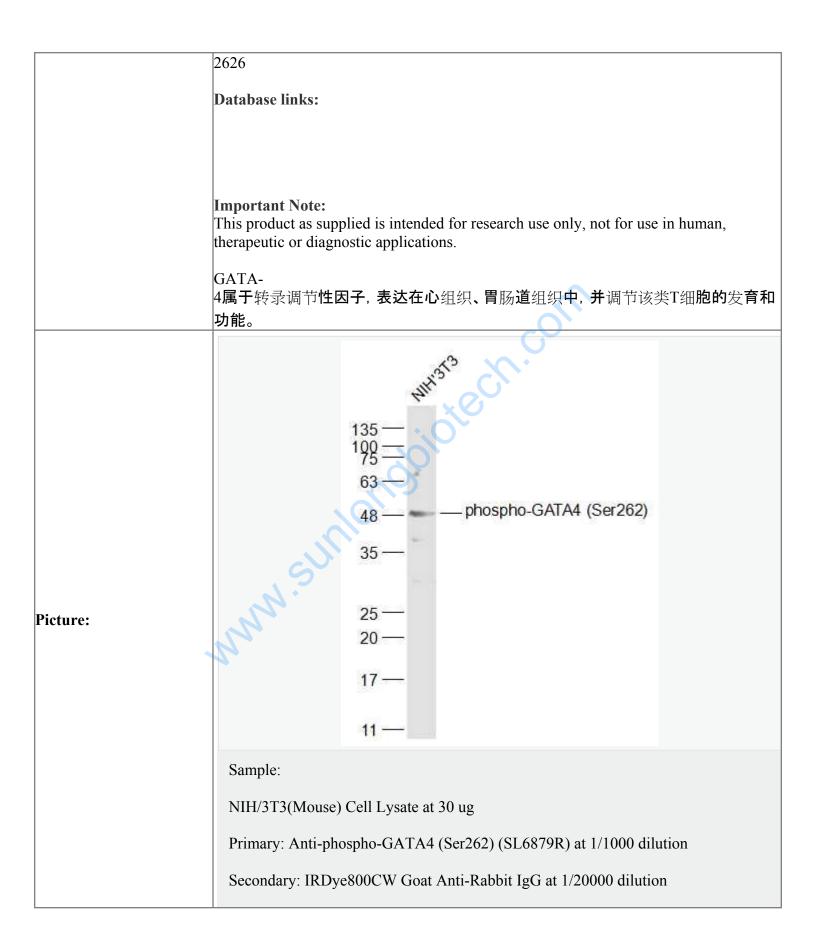
Defects in GATA4 are the cause of atrial septal defect type 2 (ASD2) [MIM:607941]. ASD2 is a congenital heart malformation characterized by incomplete closure of the wall between the atria resulting in blood flow from the left to the right atria. ASD2 patients show other heart abnormalities including ventricular and atrioventricular septal defects, pulmonary valve thickening or insufficiency of the cardiac valves. ASD2 is not associated with defects in the cardiac conduction system or non-cardiac abnormalities.

### Similarity:

Contains 2 GATA-type zinc fingers.

SWISS: P43694

Gene ID:



Predicted band size: 49 kD
Observed band size: 49 kD

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