

## Rabbit Anti-FOG2 antibody

SL11942R

**Product Name** FOG2

**Chinese Name** GATABinding protein2 伴侣蛋白抗体

**Alias** FOG-2; FOG2\_HUMAN; Friend of GATA 2; Friend of GATA protein 2; Friend of GATA2 ; hFOG2; Zinc finger protein 89B; Zinc finger protein M2; Zinc finger protein multitype 2 ; Zinc finger protein

**Research Area** Cardiovascular Cell biology Neurobiology Signal transduction transcriptional regulatory factor 2 protein Epigenetics

**Immunogen Species** Rabbit

**Clonality** Polyclonal

**React Species** (predicted: Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit, Sheep, )

WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA

**Applications** (Paraffin sections need antigen repair )  
not yet tested in other applications.  
optimal dilutions/concentrations should be determined by the end user.

**Theoretical molecular weight** 128kDa

**Cellular localization** The nucleus

**Form** Liquid

**Concentration** 1mg/ml

**immunogen** KLH conjugated synthetic peptide derived from human FOG2: 701-800/1151

**Lsotype** IgG

**Purification** affinity purified by Protein A

**Buffer Solution** 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

**Storage** Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

**Attention** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**PubMed** [PubMed](#)

**Product** The FOG family of transcriptional cofactors, including FOG (friend of GATA-1) and FOG-2, ar

## Detail

proteins that interact with the GATA family of transcriptional regulators. FOG/GATA-1 complex for erythroid and megakaryocyte maturation, and they promote differentiation during embryonic. These complexes involve the association between multiple zinc fingers on the FOG proteins and zinc finger of GATA proteins. While FOG cooperatively regulates GATA-1 induced transcription to both positively and negatively influence GATA mediated transcription. FOG-2 is predominant in heart, neurons and gonads, and it preferentially participates in the regulation of GATA-3, GATA-4. In cardiomyocytes and fibroblasts, FOG-2 inhibits GATA-4 transcriptional activity, yet FOG-2 represses GATA-1 mediated transcription in erythroid cultures deficient in FOG, suggesting that the observed effects of FOG-2 are context specific and vary between cellular systems.

### Function:

Transcription regulator that plays a central role in heart morphogenesis and development of coronary arteries from epicardium, by regulating genes that are essential during cardiogenesis. Essential cofactor for the formation of a heterodimer with transcription factors of the GATA family GATA4, GATA5 and GATA6. The heterodimer can both activate or repress transcriptional activity, depending on the cell and promoter. Also required in gonadal differentiation, possibly by regulating expression of SRY. Probably acts as a cofactor of NR2F2.

### Subunit:

Interacts with the N-terminal zinc-finger of GATA4, GATA5 and probably GATA6. Interacts with nuclear receptor RXRA when ligand bound (By similarity). Interacts with corepressor CTBP2; this interaction is however not essential for corepressor activity. Able to bind GATA1 in vitro. Interacts with NR2F2.

### Subcellular Location:

Nucleus.

### Tissue Specificity:

Widely expressed at low level.

### DISEASE:

Defects in ZFPM2 may be a cause of tetralogy of Fallot (TOF) [MIM:187500]. TOF is a congenital anomaly which consists of pulmonary stenosis, ventricular septal defect, dextroposition of the aorta (on the right side instead of the left) and hypertrophy of the right ventricle. This condition results in cyanosis at birth due to inadequate oxygenation. Surgical correction is emergent.

Defects in ZFPM2 are the cause of diaphragmatic hernia 3 (DIH3) [MIM:610187]; a form of congenital diaphragmatic hernia (CDH). CDH refers to a group of congenital defects in the structural integrity of the diaphragm associated with often lethal pulmonary hypoplasia and pulmonary hypertension.

### Similarity:

Belongs to the FOG (Friend of GATA) family.

Contains 3 C2H2-type zinc fingers.

Contains 5 C2HC-type zinc fingers.

### SWISS:



Q8WW38

**Gene ID:**  
23414

**Database links:**

[Entrez Gene: 23414](#) Human

[Omir: 603693](#) Human

[SwissProt: Q8WW38](#) Human

[Unigene: 431009](#) Human