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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 ; hFOG-2 ; ZFPM2; Zinc finger protein 89B; Zinc finger protein M2; Zinc finger protein multitype 2 ; Zinc finger protein ZFPM2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	128kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human FOG2:701-800/1151
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:	The FOG family of transcriptional cofactors, including FOG (friend of GATA-1) and FOG-2, are zinc finger proteins that interact with the GATA family of transcriptional regulators. FOG/GATA-1 complexes are required for erythroid and megakaryocyte maturation, and they promote differentiation during embryonic development. These complexes involve the association between multiple zinc fingers on the FOG proteins

and the N-terminal zinc finger of GATA proteins. While FOG cooperatively regulates GATA-1 induced transcription, FOG-2 is able to both positively and negatively influence GATA mediated transcription. FOG-2 is predominantly expressed in heart, neurons and gonads, and it preferentially participates in the regulation of GATA-3, GATA-4 and GATA-6. In cardiomyocytes and fibroblasts, FOG-2 inhibits GATA-4 transcriptional activity, yet FOG-2 restores 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 vessels from epicardium, by regulating genes that are essential during cardiogenesis. Essential cofactor that acts via the formation of a heterodimer with transcription factors of the GATA family GATA4, GATA5 and GATA6. Such heterodimer can both activate or repress transcriptional activity, depending on the cell and promoter context. Also required in gonadal differentiation, possibly be regulating expression of SRY. Probably acts a corepressor of NR2F2.

Subunit:
Interacts with the N-terminal zinc-finger of GATA4, GATA5 and probably GATA6. Interacts with retinoid 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 and NR2F6

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 heart anomaly which consists of pulmonary stenosis, ventricular septal defect, dextroposition of the aorta (aorta is on the right side instead of the left) and hypertrophy of the right ventricle. This condition results in a blue baby 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: 23414Human Omim: 603693Human SwissProt: Q8WW38Human Unigene: 431009Human **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.