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FOG2 Rabbit pAb

Catalog # AP99361

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q8WW38
Other Accession	Q8WW38
Predicted	Rat, Pig, Human, Mouse, Rabbit, Chicken, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	128159
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human FOG2
Epitope Specificity	701-800/1151
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the FOG (Friend of GATA) family. Contains 3 C2H2-type zinc fingers. Contains 5 C2HC-type zinc fingers.
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
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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID	23414
Other Names	DIH3; FOG2; SRXY9; ZC2HC11B; ZNF89B; hFOG-2; FOG2_HUMAN; ZFPM2; Friend of GATA protein 2 (FOG-2 | Friend of GATA 2 | hFOG-2); Zinc finger protein 89B; Zinc finger protein multitype 2; zinc finger protein, FOG family member 2; zinc finger protein, multitype 2; PR/SET domain 19
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	ZFPM2
Synonyms	FOG2, ZNF89B
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 (By similarity).
Cellular Location	Nucleus.
Tissue Location	Widely expressed at low level.

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