

GATA6 Rabbit pAb

Catalog # AP97810

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q92908
Other Accession	Q92908
Reactivity	Mouse
Predicted	Rat, Pig, Human, Rabbit, Chicken, Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	60033
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GATA6
Epitope Specificity	451-550/595
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 2 GATA-type zinc fingers.
SUBUNIT	Interacts with LMCD1 (By similarity).
DISEASE	Defects in GATA6 are a cause of conotruncal heart malformations (CTHM) [MIM:217095]. A group of congenital heart defects involving the outflow tracts. Examples include truncus arteriosus communis, double-outlet right ventricle and transposition of great arteries. Truncus arteriosus communis is characterized by a single outflow tract instead of a separate aorta and pulmonary artery. In transposition of the great arteries, the aorta arises from the right ventricle and the pulmonary artery from the left ventricle. In double outlet of the right ventricle, both the pulmonary artery and aorta arise from the right ventricle. Note=GATA6 mutations have been found in patients with non-syndromic persistent truncus arteriosus (PubMed:19666519). Defects in GATA6 are the cause of atrial septal defect type 9 (ASD9) [MIM:614475]. 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. Some patients manifest tricuspid valve disease, pulmonary valve disease, and pulmonary artery hypertension. Defects in GATA6 are a cause of tetralogy of Fallot (TOF) [MIM:187500]. 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. In this condition, blood from both ventricles (oxygen-rich and oxygen-poor) is pumped into the body often causing cyanosis. Defects in GATA6 are the cause of atrioventricular septal defect type 5 (AVSD5) [MIM:614474]. A congenital heart malformation characterized by a common atrioventricular junction coexisting with deficient atrioventricular septation. The complete form involves underdevelopment of the lower part of the atrial septum and the upper part of the ventricular septum; the valve itself is also shared. A less severe form, known as ostium primum atrial septal defect, is characterized by separate atrioventricular valvar orifices despite a common junction. Defects in GATA6 are a cause of pancreatic agenesis and congenital heart defects (PACHD) [MIM:600001]. An autosomal dominant disease

	characterized by pancreatic severe hypoplasia or agenesis, diabetes mellitus, and congenital heart abnormalities including ventricular septal defect, patent ductus arteriosus, pulmonary artery stenosis, truncus arteriosus and tetralogy of Fallot.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	GATA-6 (GATA binding factor 6) is zinc-finger transcription factor that binds DNA at GATA regions; Involved in gene regulation specifically in the gastric epithelium. Cellular localization:Nuclear. Tissue Specificity: gastric epithelium.

Additional Information

Gene ID	2627
Other Names	GATA-6; GATA6_CHICK; GATA6; GATA-binding factor 6; GATA6_HUMAN; GATA6_MOUSE; GATA6_PIG; GATA6_RAT; DNA-binding protein GATA-GT2; GATA binding protein 6; GATA-binding protein 6
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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	GATA6
Function	Transcriptional activator (PubMed: 19666519 , PubMed: 22750565 , PubMed: 22824924 , PubMed: 27756709). Regulates SEMA3C and PLXNA2 (PubMed: 19666519). Involved in gene regulation specifically in the gastric epithelium (PubMed: 9315713). May regulate genes that protect epithelial cells from bacterial infection (PubMed: 16968778). Involved in bone morphogenetic protein (BMP)-mediated cardiac-specific gene expression (By similarity). Binds to BMP response element (BMPRE) DNA sequences within cardiac activating regions (By similarity). In human skin, controls several physiological processes contributing to homeostasis of the upper pilosebaceous unit. Triggers ductal and sebaceous differentiation as well as limits cell proliferation and lipid production to prevent hyperseborrhoea. Mediates the effects of retinoic acid on sebocyte proliferation, differentiation and lipid production. Also contributes to immune regulation of sebocytes and antimicrobial responses by modulating the expression of anti- inflammatory genes such as IL10 and pro-inflammatory genes such as IL6, TLR2, TLR4, and IFNG. Activates TGFB1 signaling which controls the interfollicular epidermis fate (PubMed: 33082341).
Cellular Location	Nucleus
Tissue Location	Expressed in heart, gut and gut-derived tissues. Expressed in skin upper pilosebaceous unit. Expression is decreased or lost in acne lesions (PubMed: 33082341).

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