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NKX2-5 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17406C

Product Information

Application	WB, E
Primary Accession	P52952
Other Accession	NP_001159648.1, NP_001159647.1
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36777
Calculated MW	34918
Antigen Region	2-5

Additional Information

Gene ID	1482
Other Names	Homeobox protein Nkx-25, Cardiac-specific homeobox, Homeobox protein CSX, Homeobox protein NK-2 homolog E, NKX2-5, CSX, NKX25, NKX2E
Target/Specificity	This NKX2-5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 82-111 amino acids from the Central region of human NKX2-5.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	NKX2-5 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NKX2-5
Synonyms	CSX, NKX2.5, NKX2E

Function	Transcription factor required for the development of the heart and the spleen (PubMed:22560297). During heart development, acts as a transcriptional activator of NPPA/ANF in cooperation with GATA4 (By similarity). May cooperate with TBX2 to negatively modulate expression of NPPA/ANF in the atrioventricular canal (By similarity). Binds to the core DNA motif of NPPA promoter (PubMed:22849347, PubMed:26926761). Together with PBX1, required for spleen development through a mechanism that involves CDKN2B repression (PubMed:22560297). Positively regulates transcription of genes such as COL3A1 and MMP2, resulting in increased pulmonary endothelial fibrosis in response to hypoxia (PubMed:29899023).
Cellular Location	Nucleus.
Tissue Location	Expressed only in the heart.

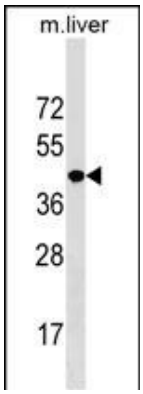
Background

This gene encodes a homeobox-containing transcription factor. This transcription factor functions in heart formation and development. Mutations in this gene cause atrial septal defect with atrioventricular conduction defect, and also tetralogy of Fallot, which are both heart malformation diseases. Mutations in this gene can also cause congenital hypothyroidism non-goitrous type 5, a non-autoimmune condition. Alternative splicing results in multiple transcript variants.

References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
De Luca, A., et al. Clin. Genet. (2010) In press :
Stallmeyer, B., et al. Clin. Genet. (2010) In press :
Narumi, S., et al. J. Clin. Endocrinol. Metab. 95(4):1981-1985(2010)
Joubert, B.R., et al. Genome Med 2 (3), 17 (2010) :

Images



NKX2-5 Antibody (Center) (Cat. #AP17406c) western blot analysis in mouse liver tissue lysates (35ug/lane).This demonstrates the NKX2-5 antibody detected the NKX2-5 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.