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Mouse Nkx2-5 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21109a

Product Information

Application	WB, E
Primary Accession	P42582
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB51145
Calculated MW	34163

Additional Information

Gene ID	18091
Other Names	Homeobox protein Nkx-25, Cardiac-specific homeobox, Homeobox protein CSX, Homeobox protein NK-2 homolog E, Nkx2-5, Csx, Nkx-25, Nkx2e
Target/Specificity	This mouse Nkx2-5 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 192-235 amino acids from the Central region of mouse Nkx2-5.
Dilution	WB~~1:1000 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	Mouse 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, Nkx-2.5, Nkx2e
Function	Transcription factor required for the development of the heart and the spleen (PubMed:16556915, PubMed:19483677, PubMed:22560297,

	PubMed:9584153). During heart development, acts as a transcriptional activator of NPPA/ANF in cooperation with GATA4 (PubMed:9584153). May cooperate with TBX2 to negatively modulate expression of NPPA/ANF in the atrioventricular canal (PubMed:12023302). Binds to the core DNA motif of NPPA promoter (PubMed:19483677). 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 (By similarity).
Cellular Location	Nucleus.
Tissue Location	Predominantly in the adult and embryonic heart, and to a lesser extent in lingual muscle, spleen and stomach

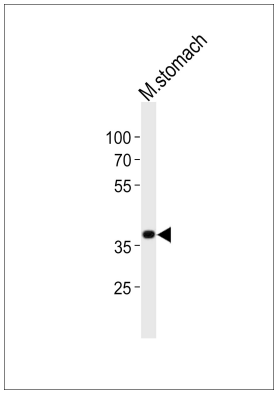
Background

Implicated in commitment to and/or differentiation of the myocardial lineage. Acts as a transcriptional activator of ANF in cooperation with GATA4. It is transcriptionally controlled by PBX1 and acts as a transcriptional repressor of CDKN2B. Together with PBX1, it is required for spleen development through a mechanism that involves CDKN2B repression.

References

Lints T.J.,et al.Development 119:419-431(1993).
Lints T.J.,et al.Development 119:969-969(1993).
Searcy R.D.,et al.Development 125:4461-4470(1998).
Komuro I.,et al.Proc. Natl. Acad. Sci. U.S.A. 90:8145-8149(1993).
Kim Y.H.,et al.J. Biol. Chem. 273:25875-25879(1998).

Images



Western blot analysis of lysate from mouse stomach tissue lysate, using Nkx2-5 Antibody (Center)(Cat. #AP21109a). AP21109a was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.

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