

Mouse Nkx2-5 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21109a

Product Information

Application WB, E Primary Accession P42582

Reactivity Human, Rat, Mouse

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:<u>16556915</u>, PubMed:<u>19483677</u>, PubMed:<u>22560297</u>, PubMed:<u>9584153</u>). 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

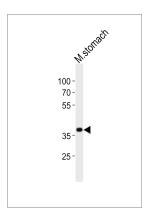
Background

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'.