

# Mouse Nkx2-5 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21109a

# **Specification**

# Mouse Nkx2-5 Antibody (Center) - Product Information

**Application** WB,E **Primary Accession** P42582 O35767 Other Accession Reactivity Mouse Predicted Rat Host Rabbit Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 34163

# Mouse Nkx2-5 Antibody (Center) - 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

### **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.

# Mouse Nkx2-5 Antibody (Center) - 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>9584153</u>, PubMed:<u>16556915</u>, PubMed:<u>19483677</u>, PubMed:<u>22560297</u>). During heart development, acts as a transcriptional activator of NPPA/ANF in cooperation with GATA4 (PubMed:<u>9584153</u>). May cooperate with TBX2 to negatively modulate expression of NPPA/ANF in the atrioventricular canal (PubMed:<u>12023302</u>). Binds to the core DNA motif of NPPA promoter (PubMed:<u>19483677</u>). Together with PBX1, required for spleen development through a mechanism that involves CDKN2B repression (PubMed:<u>22560297</u>). 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**

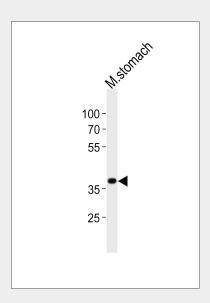
Predominantly in the adult and embryonic heart, and to a lesser extent in lingual muscle, spleen and stomach

# Mouse Nkx2-5 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Mouse Nkx2-5 Antibody (Center) - 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.

# Mouse Nkx2-5 Antibody (Center) - 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.

# Mouse Nkx2-5 Antibody (Center) - 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).