

# Mouse Nkx2-5 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20850c

# **Specification**

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

Application WB,E
Primary Accession P42582
Other Accession O35767

Reactivity Mouse, Rat, Hamster

Host Rabbit Clonality Polyclonal Isotype Rabbit IgG

# 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 192-225 amino acids from the Central region of human Mouse 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**

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: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**

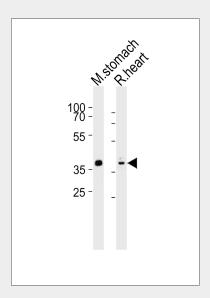
Predominantly in the adult and embryonic heart, and to a lesser extent in lingual muscle, spleen and stomach

# Mouse Nkx2-5 Antibody (Center) - Protocols

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

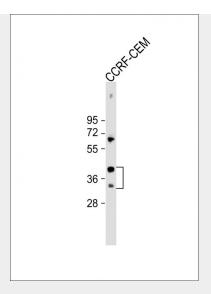
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Mouse Nkx2-5 Antibody (Center) - Images

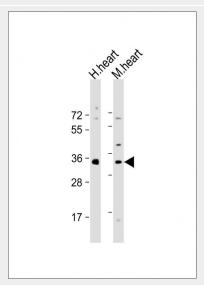


Western blot analysis of lysates from mouse stomach, rat heart tissue (from left to right), using Mouse Nkx2-5 Antibody (Center)(Cat. #AP20850c). AP20850c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.





Anti-Mouse Nkx2-5 Antibody (Center) at 1:2000 dilution + CCRF-CEM whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 34 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



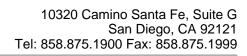
All lanes : Anti-Mouse Nkx2-5 Antibody (Center) at 1:2000 dilution Lane 1: human heart lysate Lane 2: mouse heart lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 34 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

# 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).