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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.

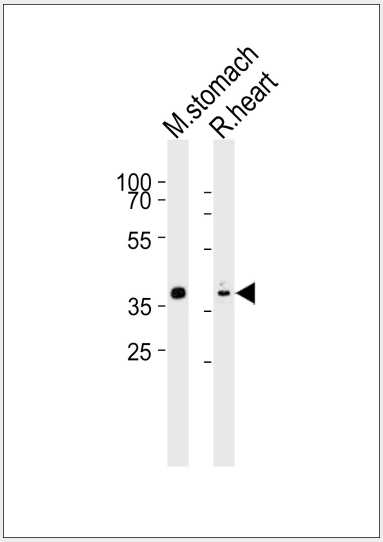
Tissue Location
Predominantly in the adult and embryonic heart, and to a lesser extent in lingual muscle, spleen and stomach

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
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- 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.

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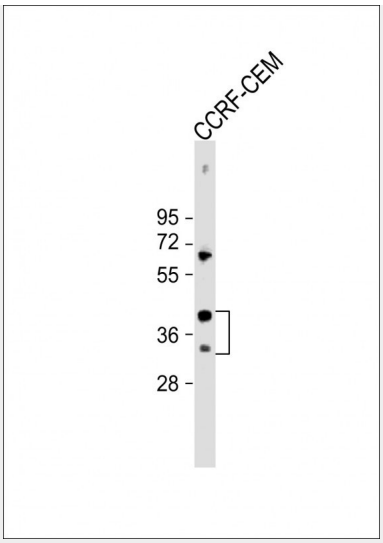
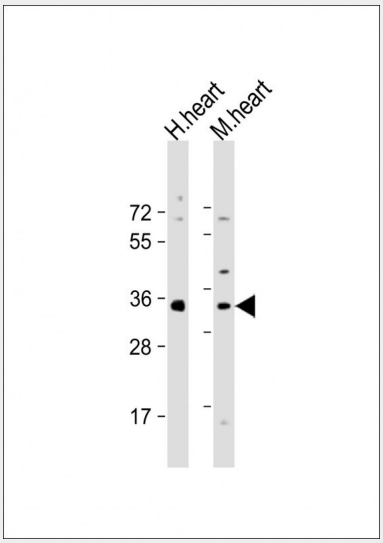


Anti-Mouse Nkx2-5 Antibody (Center) at 1:2000 dilution + CCRF-CEM whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 34 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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 µg 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).