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Mouse Nkx2-5 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AW5513

Specification

Mouse Nkx2-5 Antibody (Center) - Product Information

Application	**WB, IHC,E**
Primary Accession	P42582
Reactivity	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**M=34;H=35;R=34 KDa**
Isotype	**Rabbit IgG**
Antigen Source	**HUMAN**

Mouse Nkx2-5 Antibody (Center) - Additional Information

Gene ID 18091

Antigen Region
98-133

Other Names
Homeobox protein Nkx-25, Cardiac-specific homeobox, Homeobox protein CSX, Homeobox protein NK-2 homolog E, Nkx2-5, Csx, Nkx-25, Nkx2e

Dilution
WB~~1:2000
IHC~~1:25

Target/Specificity
This mouse Nkx2-5 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 98-133 amino acids from the Central region of mouse Nkx2-5.

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:9584153, PubMed:16556915, PubMed:19483677, PubMed:22560297). 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

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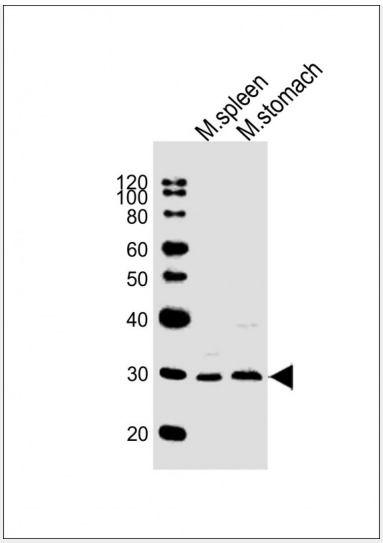
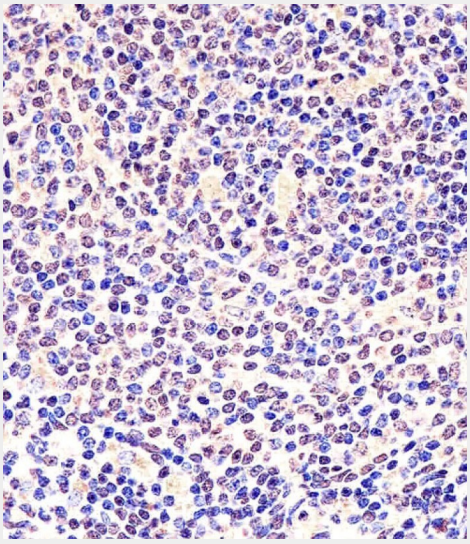


All lanes : Anti-Nkx2-5 Antibody (Center) at 1:2000 dilution Lane 1: mouse spleen lysates Lane 2: mouse stomach lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 34 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



AW5513 staining Mouse Nkx2-5 in mouse spleen sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

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).