

# Mouse Nkx2-5 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AW5513

## Product Information

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Application	WB, IHC
Primary Accession	<a href="#">P42582</a>
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34163
Isotype	Rabbit IgG
Antigen Source	HUMAN

## Additional Information

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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~~1:100~500
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.

## Protein Information

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Name	Nkx2-5
Synonyms	Csx, Nkx-2.5, Nkx2e
Function	Transcription factor required for the development of the heart and the spleen (PubMed: <a href="#">16556915</a> , PubMed: <a href="#">19483677</a> , PubMed: <a href="#">22560297</a> , PubMed: <a href="#">9584153</a> ). During heart development, acts as a transcriptional activator of NPPA/ANF in cooperation with GATA4 (PubMed: <a href="#">9584153</a> ). 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

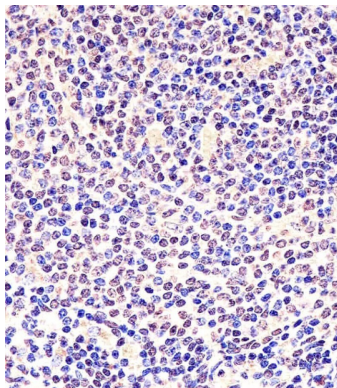
## Background

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.

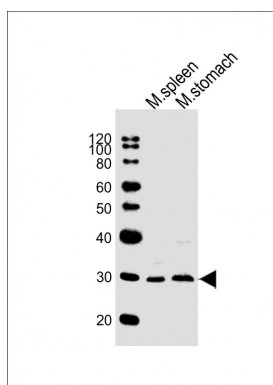
## References

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## Images



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 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.