

NKX2-5 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17406C

Specification

NKX2-5 Antibody (Center) - Product Information

Application WB,E
Primary Accession P52952

Other Accession <u>NP_001159648.1</u>, <u>NP_001159647.1</u>

Reactivity Human, Mouse

Host Rabbit Clonality Polyclonal Isotype Rabbit IgG

Antigen Region 2-5

NKX2-5 Antibody (Center) - Additional Information

Gene ID 1482

Other Names

Homeobox protein Nkx-25, Cardiac-specific homeobox, Homeobox protein CSX, Homeobox protein NK-2 homolog E, NKX2-5, CSX, NKX25, NKX2E

Target/Specificity

This NKX2-5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 82-111 amino acids from the Central region of human NKX2-5.

Dilution

WB~~1:2000

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

NKX2-5 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

NKX2-5 Antibody (Center) - Protein Information

Name NKX2-5

Synonyms CSX, NKX2.5, NKX2E



Function Transcription factor required for the development of the heart and the spleen (PubMed:22560297). During heart development, acts as a transcriptional activator of NPPA/ANF in cooperation with GATA4 (By similarity). May cooperate with TBX2 to negatively modulate expression of NPPA/ANF in the atrioventricular canal (By similarity). Binds to the core DNA motif of NPPA promoter (PubMed:22849347, PubMed:26926761). 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 (PubMed:29899023).

Cellular Location Nucleus.

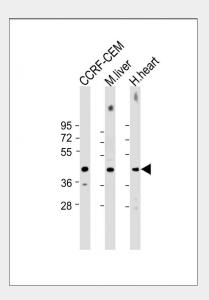
Tissue LocationExpressed only in the heart.

NKX2-5 Antibody (Center) - Protocols

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

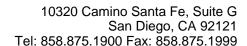
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NKX2-5 Antibody (Center) - Images



All lanes : Anti-NKX2-5 Antibody (Center) at 1:2000 dilution Lane 1: CCRF-CEM whole cell lysate Lane 2: mouse liver lysate Lane 3: human heart lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 35 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

NKX2-5 Antibody (Center) - Background





This gene encodes a homeobox-containing transcription factor. This transcription factor functions in heart formation and development. Mutations in this gene cause atrial septal defect with atrioventricular conduction defect, and also tetralogy of Fallot, which are both heart malformation diseases. Mutations in this gene can also cause congenital hypothyroidism non-goitrous type 5, a non-autoimmune condition. Alternative splicing results in multiple transcript variants.

NKX2-5 Antibody (Center) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) De Luca, A., et al. Clin. Genet. (2010) In press: Stallmeyer, B., et al. Clin. Genet. (2010) In press: Narumi, S., et al. J. Clin. Endocrinol. Metab. 95(4):1981-1985(2010) Joubert, B.R., et al. Genome Med 2 (3), 17 (2010):