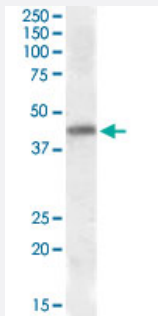


NKX2-5 polyclonal antibody

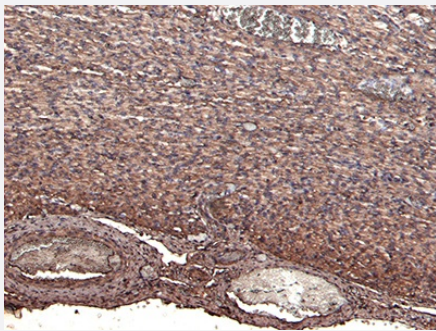
Catalog # PAB14394 Size 100 ug

Applications



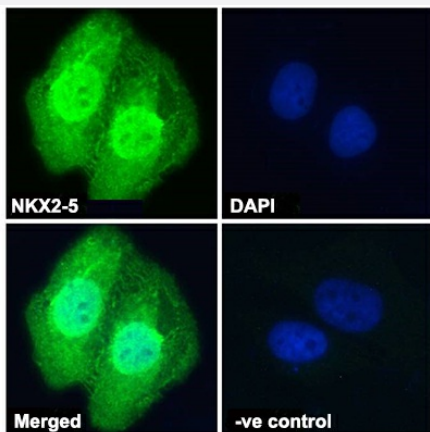
Western Blot (Tissue lysate)

NKX2-5 polyclonal antibody (Cat # PAB14394) (0.3 ug/mL) staining of human heart lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

NKX2-5 polyclonal antibody (Cat # PAB14394) (4 ug/mL) staining of paraffin embedded Human Heart. Heat induced antigen retrieval with citrate buffer pH 6, HRP-staining.



Immunofluorescence

NKX2-5 polyclonal antibody (Cat # PAB14394) Immunofluorescence analysis of paraformaldehyde fixed U2OS cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10 ug/mL) followed by Alexa Fluor 488 secondary antibody (2 ug/mL), showing nuclear and cytoplasmic staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10 ug/mL) followed by Alexa Fluor 488 secondary antibody (2 ug/mL).

Specification

Product Description	Goat polyclonal antibody raised against synthetic peptide of NKX2-5.
Immunogen	A synthetic peptide corresponding to human NKX2-5.
Sequence	C-PRAYSDPDPAKDPR
Host	Goat
Theoretical MW (kDa)	34.9, 11.7, 16.1
Reactivity	Human, Mouse, Rat
Specificity	Approx 45 KDa band observed in human heart lysates (calculated MW of 34.9 KDa according to NP_004378.1). The observed molecular weight corresponds to earlier findings in literature with different antibodies (Shiojima et al, Circ Res. 1996 Nov;79(5):920-9.; PMID: 8888684).
Form	Liquid
Purification	Antigen affinity purification
Concentration	0.5 mg/mL
Recommend Usage	ELISA (1:32000) Immunohistochemistry (4 ug/mL) Immunofluorescence (10 ug/mL) Western Blot (0.1-0.5 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In Tris saline, pH 7.3 (0.5% BSA, 0.02% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Tissue lysate)

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- Enzyme-linked Immunoabsorbent Assay

Gene Info — NKX2-5

Entrez GeneID [1482](#)

Protein Accession# [NP_004378.1;NP_001159647.1;NP_001159648.1](#)

Gene Name NKX2-5

Gene Alias CHNG5, CSX, CSX1, NKX2.5, NKX2E, NKX4-1

Gene Description NK2 transcription factor related, locus 5 (Drosophila)

Omim ID [108900 187500 600584](#)

Gene Ontology [Hyperlink](#)

Gene Summary Homeobox-containing genes play critical roles in regulating tissue-specific gene expression essential for tissue differentiation, as well as determining the temporal and spatial patterns of development (Shiojima et al., 1995 [PubMed 7665173]). It has been demonstrated that a Drosophila homeobox-containing gene called 'tinman' is expressed in the developing dorsal vessel and in the equivalent of the vertebrate heart. Mutations in tinman result in loss of heart formation in the embryo, suggesting that tinman is essential for Drosophila heart formation. Furthermore, abundant expression of Csx, the presumptive mouse homolog of tinman, is observed only in the heart from the time of cardiac differentiation. CSX, the human homolog of murine Csx, has a homeodomain sequence identical to that of Csx and is expressed only in the heart, again suggesting that CSX plays an important role in human heart formation.[supplied by OMIM]

Other Designations NK2 transcription factor homolog E|NK2 transcription factor related, locus 5|cardiac-specific homeobox|tinman paralog

Publication Reference

- [Abcc6 Deficiency Causes Increased Infarct Size and Apoptosis in a Mouse Cardiac Ischemia-Reperfusion Model.](#)

Mungrue IN, Zhao P, Yao Y, Meng H, Rau C, Havel JV, Gorgels TG, Bergen AA, Maclellan WR, Drake TA, Bostrom KI, Lusis AJ. Arteriosclerosis, Thrombosis, and Vascular Biology 2011 Dec; 31(12):2806.

Application: WB-Ti, Mouse, Mouse hearts

- [Perinatal loss of Nkx2-5 results in rapid conduction and contraction defects.](#)

Briggs LE, Takeda M, Cuadra AE, Wakimoto H, Marks MH, Walker AJ, Seki T, Oh SP, Lu JT, Sumners C, Raizada MK, Horikoshi N, Weinberg EO, Yasui K, Ikeda Y, Chien KR, Kasahara H.

Circulation Research 2008 Sep; 103(6):580.

Disease

- [Alagille Syndrome](#)
- [Arthritis](#)
- [Atrial Fibrillation](#)
- [Cardiovascular Diseases](#)
- [Chromosome Deletion](#)
- [Congenital Hypothyroidism](#)
- [Diabetes Mellitus](#)
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- [Ductus Arteriosus](#)
- [Ebstein Anomaly](#)
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- [Graves Disease](#)
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