

## Datasheet

### NKX2-5 polyclonal antibody

**Catalog Number:** PAB14394

**Regulation Status:** For research use only (RUO)

**Product Description:** Goat polyclonal antibody raised against synthetic peptide of NKX2-5.

**Immunogen:** A synthetic peptide corresponding to human NKX2-5.

**Sequence:** C-PRAYSDPDPKDP

**Host:** Goat

**Theoretical MW (kDa):** 34.9, 11.7, 16.1

**Reactivity:** Human, Mouse, Rat

**Applications:** ELISA, WB-Ti

(See our web site product page for detailed applications information)

**Protocols:** See our web site at

<http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

**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)

Western Blot (0.3-1 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.

**Entrez GeneID:** 1482

**Gene Symbol:** NKX2-5

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

**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]

#### References:

1. 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. Arterioscler Thromb Vasc Biol. 2011 Dec;31(12):2806-12. Epub 2011 Oct 6.
2. 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. Circ Res. 2008 Sep 12;103(6):580-90. Epub 2008 Aug 8.