

# NKX2-5 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP17406c

# Specification

# NKX2-5 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

<u>P52952</u>

# NKX2-5 Antibody (Center) Blocking Peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# NKX2-5 Antibody (Center) Blocking Peptide - Protein Information

Name NKX2-5

Synonyms CSX, NKX2.5, NKX2E

#### Function

Transcription factor required for the development of the heart and the spleen (PubMed:<a href="http://www.uniprot.org/citations/22560297" target="\_blank">22560297</a>). 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:<a href="http://www.uniprot.org/citations/22849347" target="\_blank">22849347</a>, PubMed:<a href="http://www.uniprot.org/citations/22849347" target="\_blank">26926761</a>). Together with PBX1, required for spleen development through a mechanism that involves CDKN2B repression (PubMed:<a href="http://www.uniprot.org/citations/22560297" target="\_blank">22560297" target="\_blank">22560297</a>). Positively regulates transcription of genes such as COL3A1 and MMP2, resulting in increased pulmonary endothelial fibrosis in response to hypoxia (PubMed:<a

Cellular Location Nucleus.

href="http://www.uniprot.org/citations/29899023" target=" blank">29899023</a>).



**Tissue Location** Expressed only in the heart.

### NKX2-5 Antibody (Center) Blocking Peptide - Protocols

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

#### Blocking Peptides

#### NKX2-5 Antibody (Center) Blocking Peptide - Images

#### NKX2-5 Antibody (Center) Blocking Peptide - Background

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

#### NKX2-5 Antibody (Center) Blocking Peptide - 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) :