

Mouse Nkx2-5 Blocking Peptide (Center)
Synthetic peptide
Catalog # BP21109a**Specification**

Mouse Nkx2-5 Blocking Peptide (Center) - Product Information

Primary Accession [P42582](#)
Other Accession [O35767](#)

Mouse Nkx2-5 Blocking Peptide (Center) - Additional Information

Gene ID 18091

Other Names

Homeobox protein Nkx-25, Cardiac-specific homeobox, Homeobox protein CSX, Homeobox protein NK-2 homolog E, Nkx2-5, Csx, Nkx-25, Nkx2e

Target/Specificity

The synthetic peptide sequence is selected from aa 192-205 of HUMAN Nkx2-5

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.

Mouse Nkx2-5 Blocking Peptide (Center) - Protein Information

Name Nkx2-5

Synonyms Csx, Nkx-2.5, Nkx2e

Function

Transcription factor required for the development of the heart and the spleen (PubMed:9584153, PubMed:16556915, PubMed:19483677, PubMed:22560297). During heart development, acts as a transcriptional activator of NPPA/ANF in cooperation with GATA4 (PubMed:9584153). 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

Mouse Nkx2-5 Blocking Peptide (Center) - Protocols

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

- [Blocking Peptides](#)

Mouse Nkx2-5 Blocking Peptide (Center) - Images**Mouse Nkx2-5 Blocking Peptide (Center) - 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.

Mouse Nkx2-5 Blocking Peptide (Center) - References

Lints T.J.,et al.Development 119:419-431(1993).
Lints T.J.,et al.Development 119:969-969(1993).
Searcy R.D.,et al.Development 125:4461-4470(1998).
Komuro I.,et al.Proc. Natl. Acad. Sci. U.S.A. 90:8145-8149(1993).
Kim Y.H.,et al.J. Biol. Chem. 273:25875-25879(1998).