

**Anti-Nkx2.5 Picoband Antibody**  
Catalog # ABO11984

**Specification**

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**Anti-Nkx2.5 Picoband Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P52952</a>
Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Homeobox protein Nkx-2.5(NKX2-5) detection. Tested with WB in Human;Mouse.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Nkx2.5 Picoband Antibody - Additional Information**

**Gene ID** 1482

**Other Names**

Homeobox protein Nkx-2.5, Cardiac-specific homeobox, Homeobox protein CSX, Homeobox protein NK-2 homolog E, NKX2-5, CSX, NKX2.5, NKX2E

**Calculated MW**

34918 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human, Mouse<br>

**Subcellular Localization**

Nucleus .

**Tissue Specificity**

Expressed only in the heart.

**Protein Name**

Homeobox protein Nkx-2.5

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>N.

**Immunogen**

A synthetic peptide corresponding to a sequence in the middle region of human Nkx2.5 (103-132aa AKDPRAEKKELCALQKAVELEKTEADNAER), different from the related mouse and rat sequences by five amino acids.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.**

**Sequence Similarities**

Belongs to the NK-2 homeobox family.

**Anti-Nkx2.5 Picoband Antibody - 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/26926761" 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</a>). Positively regulates transcription of genes such as COL3A1 and MMP2, resulting in increased pulmonary endothelial fibrosis in response to hypoxia (PubMed:<a href="http://www.uniprot.org/citations/29899023" target="\_blank">29899023</a>).

**Cellular Location**

Nucleus.

**Tissue Location**

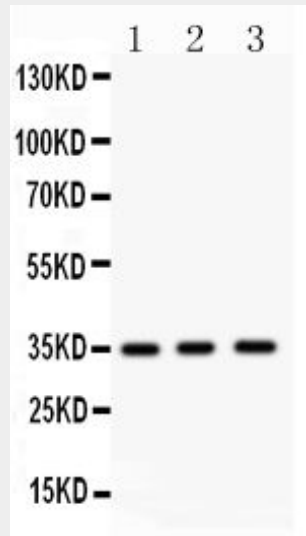
Expressed only in the heart.

**Anti-Nkx2.5 Picoband Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-Nkx2.5 Picoband Antibody - Images**



Anti- NKX2 Picoband antibody, ABO11984, Western blotting All lanes: Anti NKX2 (ABO11984) at 0.5ug/ml  
Lane 1: Mouse Spleen Tissue Lysate at 50ug  
Lane 2: Mouse Cardiac Muscle Tissue Lysate at 50ug  
Lane 3: HELA Whole Cell Lysate at 40ug  
Predicted bind size: 35KD  
Observed bind size: 35KD

#### **Anti-Nkx2.5 Picoband Antibody - Background**

Homeobox protein Nkx-2.5, also known as NKX2E or CSX is a protein that in humans is encoded by the NKX2-5 gene. It is mapped to 5q35.1. 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. Nkx2.5 and Tbx5 directly bound to the promoter of the gene encoding cardiac-specific natriuretic peptide precursor type A (NPPA) in tandem, and both transcription factors showed synergistic activation. The cardiac homeobox protein Nkx2.5 is essential in cardiac development, and mutations in CSX (which encodes Nkx2.5) cause various congenital heart malformations.