

Datasheet for ABIN3043568

anti-NK2 Homeobox 5 antibody (Middle Region)



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1 Image

Overview

Quantity:	100 µg
Target:	NK2 Homeobox 5 (NKX2-5)
Binding Specificity:	AA 103-132, Middle Region
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This NK2 Homeobox 5 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	Anti-Nkx2.5/NKX2-5 Antibody Picoband®
Immunogen:	A synthetic peptide corresponding to a sequence in the middle region of human Nkx2.5, different from the related mouse and rat sequences by five amino acids.
Sequence:	AKDPRAEKKE LCALQKAVEL EKTEADNAER
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins
Characteristics:	Anti-Nkx2.5/NKX2-5 Antibody Picoband® (ABIN3043568). Tested in WB applications. This antibody reacts with Human, Mouse. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Product Details

Purification: Immunogen affinity purified.

Target Details

Target: NK2 Homeobox 5 (NKX2-5)

Alternative Name: NKX2-5 ([NKX2-5 Products](#))

Background: Synonyms: Homeobox protein Nkx-2.5, Cardiac-specific homeobox, Homeobox protein CSX, Homeobox protein NK-2 homolog E, NKX2-5, CSX, NKX2.5, NKX2E,
Tissue Specificity: Expressed only in the heart.
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 ly 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.
Sequence Similarities: Belongs to the NK-2 homeobox family.

Molecular Weight: 35 kDa

Gene ID: 1482

UniProt: [P52952](#)

Pathways: [Regulation of Muscle Cell Differentiation](#), [Skeletal Muscle Fiber Development](#)

Application Details

Application Notes: Western blot, 0.1-0.5 µg/mL, Human, Mouse
1. Hiroi, Y., Kudoh, S., Monzen, K., Ikeda, Y., Yazaki, Y., Nagai, R., Komuro, I. Tbx5 associates with Nkx2-5 and synergistically promotes cardiomyocyte differentiation. Nature Genet. 28: 276-280, 2001. 2. Shiojima, I., Komuro, I., Inazawa, J., Nakahori, Y., Matsushita, I., Abe, T., Nagai, R., Yazaki, Y. Assignment of cardiac homeobox gene CSX to human chromosome 5q34. Genomics 27: 204-206, 1995. 3. Turbay D, Wechsler SB, Blanchard KM, Izumo S (January 1997). "Molecular cloning, chromosomal mapping, and characterization of the human cardiac-specific homeobox gene hCsx". Mol Med 2 (1): 86-96.

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB.

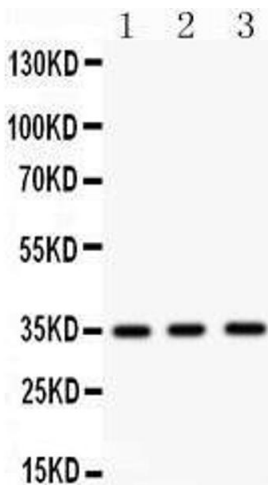
Application Details

Restrictions: For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ , 0.05 mg NaN ₃ .
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C, -20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

Images



Western Blotting

Image 1. Anti- NKX2 Picoband antibody, Western blotting All lanes: Anti NKX2 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