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Nkx2.5 Rabbit pAb

Catalog # AP98088

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P52952
Other Accession	P52952
Reactivity	Rat, Human
Predicted	Pig, Mouse, Rabbit, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34918
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Nkx2.5
Epitope Specificity	85-180/324
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	In humans, mutations of the gene encoding the homeobox transcription factor Nkx2.5 result in electrical conduction defects and morphological abnormalities of the heart (Dupays et al., 2005). In the heart, Nkx2.5 is expressed in both the myocardium and the endocardium. Differentiation of embryonic stem cells to Nkx2.5-positive cardiomyocytes is facilitated by Wnt11.

Additional Information

Gene ID	1482
Other Names	CHNG5; CSX; CSX1; HLHS2; NKX2.5; NKX2E; NKX4-1; VSD3; Nkx-2.5; tinman; NKX25_CHICK; cNKx-2.5; Homeobox protein NK-2 homolog E; NKX25_HUMAN; NKX2-5; Cardiac-specific homeobox; Homeobox protein CSX; NKX25_MOUSE; NKX25_RAT; rNKx-2.5; NK2 homeobox 5; cardiac-specific homeo box; NK2 transcription factor related, locus 5 (Drosophila); tinman (Drosophila) homolog
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	NKX2-5
Synonyms	CSX, NKX2.5, NKX2E
Function	Transcription factor required for the development of the heart and the spleen (PubMed:22560297). 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:22849347, PubMed:26926761). 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 (PubMed:29899023).
Cellular Location	Nucleus.
Tissue Location	Expressed only in the heart.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.