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NKX2.5 Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 30-42	Source/Isotype: Rabbit	UniProt ID: #P52952	Entrez-Gene Id: 1482
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Product Usage Information	Application Western Blotting Immunoprecipitation	Dilution 1:1000 1:50
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.	
Specificity/Sensitivity	NKX2.5 Antibody detects endogenous levels of total NKX2.5 protein.	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala71 of human NKX2.5 protein. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	NKX2.5 is a member of the NKX homeobox transcription factor family. NKX2.5 plays an essential role in heart development and is among the earliest factors expressed in the cardiac lineage in developing embryos. Targeted disruption of the murine <i>Nkx2.5</i> gene results in abnormal heart morphogenesis, severe growth retardation, and embryonic lethality around E9.5 (1,2). Mutations in <i>NKX2.5</i> are likewise associated with several congenital heart conditions, such as atrial defect with atrioventricular conduction defects (ASD-AVCD) and Tetralogy of Fallot (TOF) (3,4). Transcriptional activation of <i>NKX2.5</i> is also associated with some B and T cell leukemias that result from chromosomal translocation (5-8).	
Background References	<ol style="list-style-type: none"> Lyons, I. et al. (1995) <i>Genes Dev</i> 9, 1654-66. Tanaka, M. et al. (1999) <i>Development</i> 126, 1269-80. Benson, D.W. et al. (1999) <i>J Clin Invest</i> 104, 1567-73. Reamon-Buettner, S.M. and Borlak, J. (2010) <i>Hum Mutat</i> 31, 1185-94. Nagel, S. et al. (2003) <i>Cancer Res</i> 63, 5329-34. Przybylski, G.K. et al. (2006) <i>Haematologica</i> 91, 317-21. Nagel, S. et al. (2007) <i>Cancer Res</i> 67, 1461-71. Su, X. et al. (2008) <i>Haematologica</i> 93, 1081-5. 	
Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).	
Western Blot Buffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.	
Applications Key	W: Western Blotting IP: Immunoprecipitation	
Cross-Reactivity Key	H: Human	
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