

#8792 Store at -20C

## NKX2.5 (E1Y8H) Rabbit mAb



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IF-IC, FC-FP	H	Endogenous	30-42	Rabbit IgG	#P52952	1482

### Product Usage Information

#### Application

Western Blotting  
Immunofluorescence (Immunocytochemistry)  
Flow Cytometry (Fixed/Permeabilized)

#### Dilution

1:1000  
1:400 - 1:1600  
1:800 - 1:1600

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

### Specificity / Sensitivity

NKX2.5 (E1Y8H) Rabbit mAb recognizes endogenous levels of total NKX2.5 protein.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro67 of human NKX2.5 protein.

### 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 *Nkx2.5* gene results in abnormal heart morphogenesis, severe growth retardation, and embryonic lethality around E9.5 (1,2). Mutations in *NKX2.5* 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 *NKX2.5* is also associated with some B and T cell leukemias that result from chromosomal translocation (5-8).

### Background References

- Lyons, I. et al. (1995) *Genes Dev* 9, 1654-66.
- Tanaka, M. et al. (1999) *Development* 126, 1269-80.
- Benson, D.W. et al. (1999) *J Clin Invest* 104, 1567-73.
- Reamon-Buettner, S.M. and Borlak, J. (2010) *Hum Mutat* 31, 1185-94.
- Nagel, S. et al. (2003) *Cancer Res* 63, 5329-34.
- Przybylski, G.K. et al. (2006) *Haematologica* 91, 317-21.
- Nagel, S. et al. (2007) *Cancer Res* 67, 1461-71.
- Su, X. et al. (2008) *Haematologica* 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

**WB:** Western Blotting **IF-IC:** Immunofluorescence (Immunocytochemistry)  
**FC-FP:** Flow Cytometry (Fixed/Permeabilized)

### Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster  
**X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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