#### bs-2054R

## [ Primary Antibody ]

# Bioss ANTIBODIES

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### - DATASHEET -

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

Nkx2.5 Rabbit pAb

**GenelD:** 1482 **SWISS:** P52952

Target: Nkx2.5

**Immunogen:** KLH conjugated synthetic peptide derived from human Nkx2.5:

85-180/324.

**Purification:** affinity purified by Protein A

Concentration: 1mg/ml

**Storage:** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50%

Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated

freeze/thaw cycles.

**Background:** 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.

Applications: IHC-P (1:100-500)

400-901-9800

IHC-F (1:100-500) IF (1:100-500)

Reactivity: Human, Rat

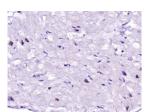
(predicted: Mouse, Rabbit,

Pig, Cow, Dog)

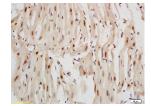
Predicted MW.: 36 kDa

Subcellular Nucleus

#### VALIDATION IMAGES



Paraformaldehyde-fixed, paraffin embedded (human heart); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Nkx2.5) Polyclonal Antibody, Unconjugated (bs-2054R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: Rat heart; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-Nkx2.5/Cardiac-specific homeobox 1 Polyclonal Antibody, Unconjugated (bs-2054R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

#### — SELECTED CITATIONS —

- [IF=2.649] Kim CW et al. Effects of cigarette smoke components on myocardial differentiation of mouse embryonic stem cells. Environ Toxicol. 2019 Sep 10. WB; Mouse. 31507073
- [IF=1.86] Ruan, Zhong-Bao, et al. "Inhibitor of p53–p21 pathway induces the differentiation of human umbilical cord derived mesenchymal stem cells into cardiomyogenic cells." Cytotechnology (2015): 1-9. ICC;="Human". 26044732