bs-9464R **[Primary Antibody]**

IRX4 Rabbit pAb

www.bioss.com.cn
sales@bioss.com.cn
techsupport@bioss.com.cn
400-901-9800

DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 50805 **SWISS:** P78413

Target: IRX4

Immunogen: KLH conjugated synthetic peptide derived from human IRX4: 131-230/519.

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: The Iroquois homeobox gene family of transcription factors regulate aspects of embryonic development including anterior/posterior and dorsal/ventral axis patterning in the central nervous system. The Iroquois family are clustered on two loci, IRXA and IRXB, which map to chromosomes 8 and 13 in mice. The IRXA group includes Irx1, Irx2 and Irx4; the IRXB group is comprised of Irx3, Irx5 and Irx6. Irx1 and Irx2 are both widely expressed during development in the lung epithelium and also in the ventricular septum. Irx1 and Irx2 also play a role in digit formation (E11.5–E14.5). The Irx gene family members are each expressed in a distinct pattern during mouse heart development. Specifically, Irx1 and Irx2 are expressed in the ventricular septum and Irx3 is expressed in the ventricular trabeculated myocardium. In addition, Irx4 is expressed in the linear heart tube and the AV canal, and Irx5 is expressed in the endocardium lining the ventricular and atrial myocardium. Furthermore, the IRX4 gene may modulate cardiac development and function. Although the heart of Irx4(-) mice appears to develop normally, adult Irx4(-) mice exhibit cardiomyopathy, including cardiac hypertrophy and decreased contractility.

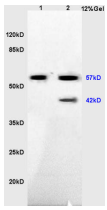
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)

Reactivity: Mouse, Rat (predicted: Human, Chicken, Dog, Horse)

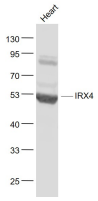
Predicted MW.: 54 kDa

Subcellular Location: Nucleus

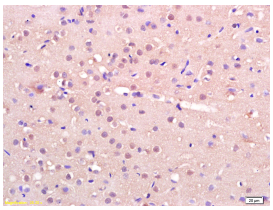
VALIDATION IMAGES



Sample: Brain (Mouse) Lysate at 40 ug Heart (Mouse) Lysate at 40 ug Primary: Anti-IRX4 (bs-9464R) at 1/300 dilution Secondary: HRP conjugated Goat-Anti-rabbit IgG (bs-0295G-HRP) at 1/5000 dilution Predicted band size: 54 kD Observed band size: 57 kD



Sample: Heart (Mouse) Lysate at 40 ug Primary: Anti- IRX4 (bs-9464R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 54 kD Observed band size: 52 kD



Tissue/cell: rat brain tissue; 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-IRX4 Polyclonal Antibody, Unconjugated(bs-9464R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

SELECTED CITATIONS

- **[IF=1.5]** Yuan, C.-W. et al. Incomplete radiofrequency ablation promotes the development of CD133+ cancer stem cells in hepatocellular carcinoma cell line HepG2 via inducing SOX9 expression. (2018) Hepatobiliary & Pancreatic Diseases International. S1499-3872(18)30202-9. FCM ;human. 30262419
- **[IF=1.19]** Bhattacharya, Subarna, et al. "High Efficiency Differentiation of Human Pluripotent Stem Cells to Cardiomyocytes and Characterization by Flow Cytometry." JoVE (Journal of Visualized Experiments) 91 (2014): e52010-e52010. Other ;="". 25286293