

Anti-IRX4 Polyclonal Antibody

Product Details

Ig Type:	IgG
Reactivity:	Mouse,Rat (predicted:Human,Chicken,Dog,Horse)
Molecular Weight:	Theoretical: 54 kDa. Actual: 52 kDa.
Purification:	Protein A purified

Applications

Verified Activity:	1. Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01 M, pH 6.0), Boiling bathing for 15 min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30 min; Blocking buffer (normal goat serum) at 37°C for 20 min; Incubation: Anti-IRX4 Polyclonal Antibody, Unconjugated (TMAB-07821) 1: 200, overnight at 4° C, followed by conjugation to the secondary antibody and DAB staining
	2. Sample: Brain (Mouse) Lysate at 40 µg Heart (Mouse) Lysate at 40 µg Primary: Anti-IRX4 (TMAB-07821) at 1/300 dilution Secondary: HRP conjugated Goat-Anti-rabbit IgG at 1/5000 dilution Predicted band size: 54 kD Observed band size: 57 kD
	3. Sample: Heart (Mouse) Lysate at 40 µg Primary: Anti-IRX4 (TMAB-07821) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 54 kD Observed band size: 52 kD
Application:	WB,IHC-P,IHC-Fr,IF
Recommended	WB: 1:500-2000; IHC-P: 1:100-500; IHC-Fr: 1:100-500; IF: 1:100-500

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen: KLH conjugated synthetic peptide: human IRX4
Antigen Species: Human
Gene ID: 50805
Uniprot ID: P78413

Research 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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