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Anti-PRRX1 Antibody

Catalog # AP51452

Product Information

Application	WB, IF/IC
Primary Accession	P54821
Reactivity	Human, Mouse, Rat, Chicken, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	27296

Additional Information

Gene ID	5396
Other Names	PMX1; Paired mesoderm homeobox protein 1; Homeobox protein PHOX1; Paired-related homeobox protein 1; PRX-1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human PRRX1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

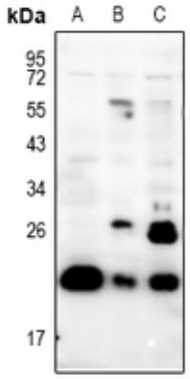
Name	PRRX1
Synonyms	PMX1
Function	Master transcription factor of stromal fibroblasts for myofibroblastic lineage progression. Orchestrates the functional drift of fibroblasts into myofibroblastic phenotype via TGF-beta signaling by remodeling a super-enhancer landscape. Through this function, plays an essential role in wound healing process (PubMed:35589735). Acts as a transcriptional regulator of muscle creatine kinase (MCK) and so has a role in the establishment of diverse mesodermal muscle types. The protein binds to an A/T-rich element in the muscle creatine enhancer (By similarity). May play a role in homeostasis and regeneration of bone, white adipose tissue and derm (By similarity).
Cellular Location	Nucleus {ECO:0000250|UniProtKB:P63013}.

Tissue Location	[Isoform 1]: Widely expressed in embryonic and adult tissues, with highest levels in skeletal muscle. Isoform 1 is either expressed at similar or higher levels compared to isoform 2 in all embryonic tissues but skeletal muscle and heart. In adult tissues, expressed at lower levels compared to isoform 2

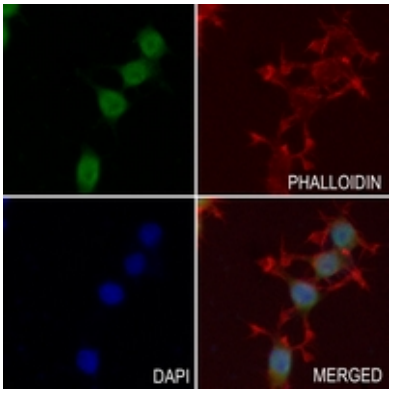
References

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Gregory S.G.,et al.Nature 441:315-321(2006).
Grueneberg D.A.,et al.Science 257:1089-1095(1992).
Sergi C.,et al.Clin. Genet. 79:293-295(2011).

Images



Western blot analysis of PRRX1 expression in mouse spleen (A), rat ovary (B), Hela (C) whole cell lysates. (Predicted band size: 27 kD; Observed band size: 27; 24 kD)



Immunofluorescent analysis of PRRX1 staining in Raw264.7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.