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Goat Anti-PRRX1 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1871a

Specification

Goat Anti-PRRX1 Antibody - Product Information

Application	**WB, E**
Primary Accession	P54821
Other Accession	NP_073207, 5396, 18933 (mouse)
Reactivity	**Human**
Predicted	**Mouse**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**27296**

Goat Anti-PRRX1 Antibody - Additional Information

Gene ID 5396

Other Names
Paired mesoderm homeobox protein 1, Homeobox protein PHOX1, Paired-related homeobox protein 1, PRX-1, PRRX1, PMX1

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-PRRX1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-PRRX1 Antibody - 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

Goat Anti-PRRX1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-PRRX1 Antibody - Images

AF1871a (1 µg/ml) staining of Human Heart lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-PRRX1 Antibody - Background

The DNA-associated protein encoded by this gene is a member of the paired family of homeobox proteins localized to the nucleus. The protein functions as a transcription co-activator, enhancing the DNA-binding activity of serum response factor, a protein required for the induction of genes by

growth and differentiation factors. The protein regulates muscle creatine kinase, indicating a role in the establishment of diverse mesodermal muscle types. Alternative splicing yields two isoforms that differ in abundance and expression patterns.

Goat Anti-PRRX1 Antibody - References

Maternal genes and facial clefts in offspring: a comprehensive search for genetic associations in two population-based cleft studies from Scandinavia. Jugessur A, et al. PLoS One, 2010 Jul 9. PMID 20634891.
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Homeobox gene Prx1 is expressed in activated hepatic stellate cells and transactivates collagen alpha1(I) promoter. Jiang F, et al. Exp Biol Med (Maywood), 2008 Mar. PMID 18296734.
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