

Goat Anti-PRRX1 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1871a**Specification**

Goat Anti-PRRX1 Antibody - Product Information

Application	WB
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

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 Cytometry](#)
- [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.

Candidate gene/loci studies in cleft lip/palate and dental anomalies finds novel susceptibility genes for clefts. Vieira AR, et al. Genet Med, 2008 Sep. PMID 18978678.

Leukemogenic properties of NUP98-PMX1 are linked to NUP98 and homeodomain sequence functions but not to binding properties of PMX1 to serum response factor. Hirose K, et al. Oncogene, 2008 Oct 9. PMID 18604245.

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.

Human prx1 gene is a target of Nrf2 and is up-regulated by hypoxia/reoxygenation: implication to tumor biology. Kim YJ, et al. Cancer Res, 2007 Jan 15. PMID 17234762.