

## PROX1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21201c

## **Specification**

## PROX1 Antibody (Center) - Product Information

Application WB,E
Primary Accession Q92786

Reactivity Human, Mouse

Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 83203

## PROX1 Antibody (Center) - Additional Information

### **Gene ID 5629**

#### **Other Names**

Prospero homeobox protein 1, Homeobox prospero-like protein PROX1, PROX-1, PROX1

### Target/Specificity

This PROX1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 444-478 amino acids from the Central region of human PROX1.

### **Dilution**

WB~~1:2000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

## **Storage**

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

#### **Precautions**

PROX1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## PROX1 Antibody (Center) - Protein Information

### Name PROX1

**Function** Transcription factor involved in developmental processes such as cell fate determination, gene transcriptional regulation and progenitor cell regulation in a number of organs. Plays a critical role in embryonic development and functions as a key regulatory protein in



neurogenesis and the development of the heart, eye lens, liver, pancreas and the lymphatic system. Involved in the regulation of the circadian rhythm. Represses: transcription of the retinoid-related orphan receptor RORG, transcriptional activator activity of RORA and RORG and the expression of RORA/G-target genes including core clock components: BMAL1, NPAS2 and CRY1 and metabolic genes: AVPR1A and ELOVL3.

#### **Cellular Location**

Nucleus {ECO:0000250|UniProtKB:P48437}. Note=RORG promotes its nuclear localization.  $\{ECO:0000250|UniProtKB:P48437\}$ 

### **Tissue Location**

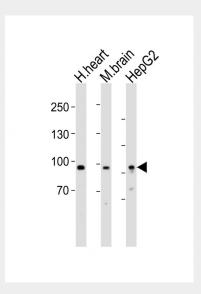
Most actively expressed in the developing lens. Detected also in embryonic brain, lung, liver and kidney. In adult, it is more abundant in heart and liver than in brain, skeletal muscle, kidney and pancreas.

## PROX1 Antibody (Center) - Protocols

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

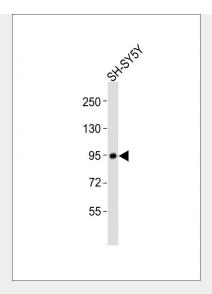
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## PROX1 Antibody (Center) - Images



All lanes : Anti-PROX1 Antibody (Center) at 1:1000 dilution Lane 1: human heart lysates Lane 2: mouse brain lysates Lane 3: HepG2 whole cell lysates Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 83 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Anti-PROX1 Antibody (Center) at 1:2000 dilution + SH-SY5Y whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 83 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

## PROX1 Antibody (Center) - Background

Transcription factor involved in developmental processes such as cell fate determination, gene transcriptional regulation and progenitor cell regulation in a number of organs. Plays a critical role in embryonic development and functions as a key regulatory protein in neurogenesis and the development of the heart, eye lens, liver, pancreas and the lymphatic system. Involved in the regulation of the circadian rhythm. Represses: transcription of the retinoid-related orphan receptor RORG, transcriptional activator activity of RORA and RORG and the expression of RORA/G-target genes including core clock components: ARNTL/BMAL1, NPAS2 and CRY1 and metabolic genes: AVPR1A and FLOVI 3.

# PROX1 Antibody (Center) - References

Zinovieva R.D.,et al.Genomics 35:517-522(1996). Ota T.,et al.Nat. Genet. 36:40-45(2004). Gregory S.G.,et al.Nature 441:315-321(2006). Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Elsir T.,et al.Cancer Metastasis Rev. 31:793-805(2012).