

**PROX-1-S514 Antibody**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP2035e**

**Specification**

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**PROX-1-S514 Antibody - Product Information**

Application	<b>WB, IHC-P, FC,E</b>
Primary Accession	<a href="#">O92786</a>
Other Accession	<a href="#">P48437</a>
Reactivity	<b>Human, Mouse</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Antigen Region	<b>492-520</b>

**PROX-1-S514 Antibody - 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 rabbits immunized with a KLH conjugated synthetic peptide between 492-520 amino acids from human PROX1.

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100  
FC~~1:25

**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**

PROX-1-S514 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**PROX-1-S514 Antibody - 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 ROR $\gamma$ , transcriptional activator activity of RORA and ROR $\gamma$  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=ROR $\gamma$  promotes its nuclear localization. {ECO:0000250|UniProtKB:P48437}

#### Tissue Location

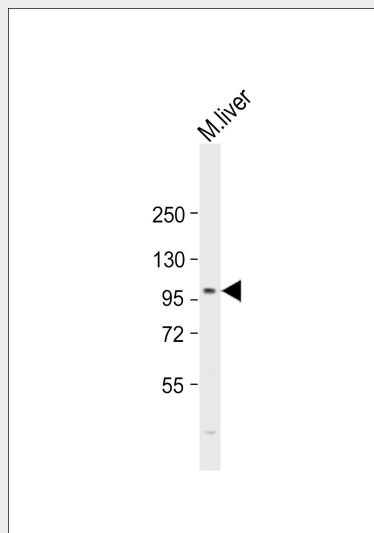
Most actively expressed in the developing lens. Detected also in embryonic brain, lung, liver and kidney. In adult, it is more abundant in heart and liver than in brain, skeletal muscle, kidney and pancreas.

### PROX-1-S514 Antibody - Protocols

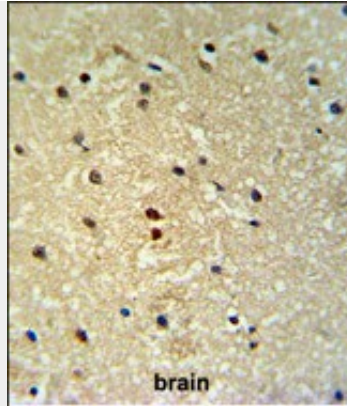
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

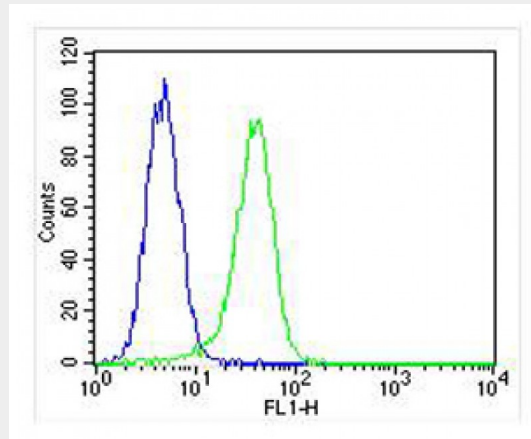
### PROX-1-S514 Antibody - Images



Anti-PROX-1-S514 Antibody at 1:2000 dilution + mouse liver lysate 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.



PROX-1-S514 Antibody (Cat. #AP2035e) IHC analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the PROX-1-S514 Antibody for immunohistochemistry. Clinical relevance has not been evaluated.



Overlay histogram showing A549 cells stained with AP2035e (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP2035e, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(NA168821) at 1/400 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG (1µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >10,000 events was performed.

**PROX-1-S514 Antibody - Background**

Apolipoprotein H has been implicated in a variety of physiologic pathways including lipoprotein metabolism, coagulation, and the production of antiphospholipid autoantibodies. APOH may be a required cofactor for anionic phospholipid binding by the antiphospholipid autoantibodies found in sera of many patients with lupus and primary antiphospholipid syndrome, but it does not seem to be required for the reactivity of antiphospholipid autoantibodies associated with infections.

**PROX-1-S514 Antibody - References**

Davila, S., et al. *Genes Immun.* 11(3):232-238(2010)  
 Zhang, C., et al. *Clin. Chim. Acta* 411 (5-6), 395-399 (2010)  
 Suresh, S., et al. *FEBS J.* 277(4):951-963(2010)