

Datasheet for ABIN388777  
**anti-PROX1 antibody (AA 185-214)**

## 3 Images

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## Overview

|                      |  |
|----------------------|--|
| Quantity:            | 400 µL   |
| Target:              | PROX1  |
| Binding Specificity: | AA 185-214   |
| Reactivity:          | Human, Mouse   |
| Host:                | Rabbit   |
| Clonality:           | Polyclonal   |
| Conjugate:           | This PROX1 antibody is un-conjugated   |
| Application:         | Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)) |

## Product Details

|                       |   |
|-----------------------|---|
| Immunogen:            | This PROX1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 185-214 amino acids from the Central region of human PROX1. |
| Clone:                | RB13371   |
| Isotype:              | Ig Fraction   |
| Predicted Reactivity: | M   |
| Purification:         | This antibody is purified through a protein A column, followed by peptide affinity purification.  |

## Target Details

|                   |  |
|-------------------|--|
| Target:           | PROX1                                    |
| Alternative Name: | PROX1 ( <a href="#">PROX1 Products</a> ) |

## Target Details

**Background:** The expression pattern of Prox1 suggests that it has a role in a variety of embryonic tissues, including lens. Prox mRNA is present in many different human tissues with lens demonstrating the highest level. Homozygous Prox1-null mice die at midgestation from multiple developmental defects, and a targeted effect on lens development has been reported. Prox1 inactivation caused abnormal cellular proliferation, downregulated expression of the cell cycle inhibitors Cdkn1b and Cdkn1c, misexpression of E-cadherin, and excessive apoptosis. Consequently, mutant lens cells failed to polarize and elongate properly, resulting in a hollow lens. Prox1 is expressed in a subpopulation of endothelial cells that by budding and sprouting give rise to the lymphatic system. Prox1 appears to be a specific and required regulator of the development of the lymphatic system. Prox1 also has been documented to be required for hepatocyte migration in the mouse. Loss of Prox1 results in a smaller liver with a reduced population of clustered hepatocytes. The homeodomain protein Prox1 regulates the egress of progenitor cells from the cell cycle in the embryonic mouse retina. Cells lacking Prox1 are less likely to stop dividing, and ectopic expression of Prox1 forces progenitor cells to exit the cell cycle. Prox1 acts as a key participant in progenitor-cell proliferation and cell-fate determination in the vertebrate retina.

**Molecular Weight:** 83203

**Gene ID:** 5629

**NCBI Accession:** [NP\\_001257545](#), [NP\\_002754](#)

**UniProt:** [Q92786](#)

**Pathways:** [Stem Cell Maintenance](#), [Regulation of Muscle Cell Differentiation](#)

## Application Details

**Application Notes:** WB: 1:500. WB: 1:500. IHC-P: 1:10~50

**Restrictions:** For Research Use only

## Handling

**Format:** Liquid

**Buffer:** Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.

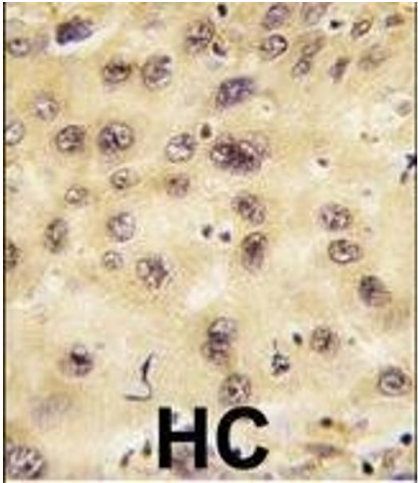
**Preservative:** Sodium azide

**Precaution of Use:** This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

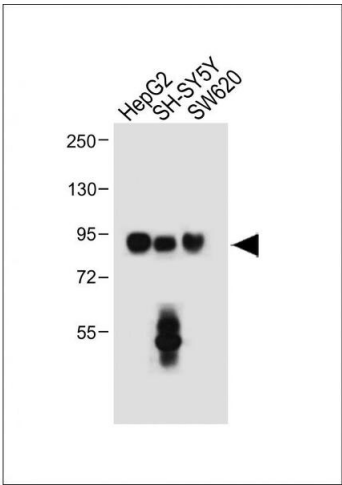
|                  |  |
|------------------|--|
| Storage:         | 4 °C,-20 °C  |
| Storage Comment: | Maintain refrigerated at 2-8 °C for up to 6 months. For long term storage store at -20 °C in small aliquots to prevent freeze-thaw cycles. |
| Expiry Date:     | 6 months   |

Images



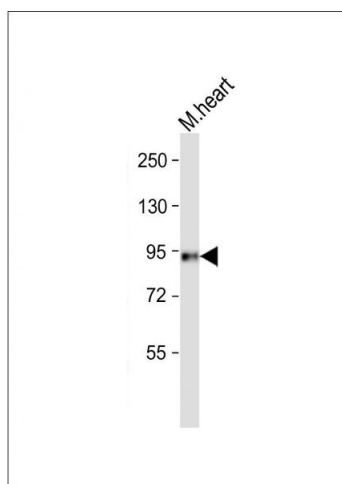
Immunohistochemistry (Paraffin-embedded Sections)

**Image 1.** Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with PROX1 antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry, clinical relevance has not been evaluated.



Western Blotting

**Image 2.** All lanes : Anti-PROX1 Antibody (Center) at 1:500 dilution Lane 1: HepG2 whole cell lysate Lane 2: SH-SY5Y, whole cell lysate Lane 3: S whole cell lysate 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.



### Western Blotting

**Image 3.** Anti-PROX1 Antibody (Center) at 1:500 dilution + Mouse heart whole cell lysate 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.