

Datasheet for ABIN388776
anti-PROX1 antibody (C-Term)[Go to Product page](#)

3 Images

Overview

Quantity:	400 µL
Target:	PROX1
Binding Specificity:	AA 492-522, C-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PROX1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	This PROX1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 492-522 amino acids from the C-terminal region of human PROX1.
Clone:	RB2853-2854
Isotype:	Ig Fraction
Predicted Reactivity:	M
Purification:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Target Details

Target:	PROX1
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Target Details

Alternative Name:	PROX1 (PROX1 Products)
Background:	<p>The expression pattern of the Prox1 homeo box gene suggests that it has a role in a variety of embryonic tissues, including lens. Analysis of mRNA reveals that Prox mRNA is present in many different human tissues and that lens demonstrated 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. The Prox1 gene 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 document 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.</p>
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:	IF: 1:10~50. WB: 1:2000. WB: 1:500
Restrictions:	For Research Use only

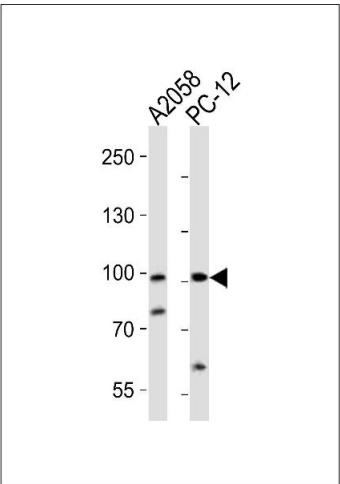
Handling

Format:	Liquid
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide

Handling

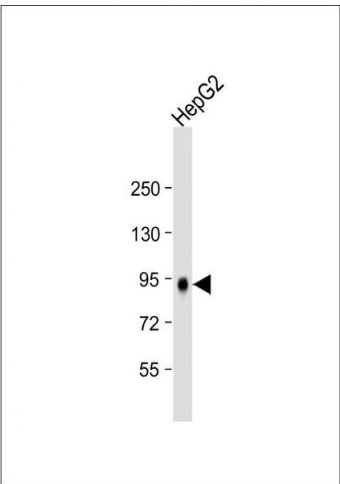
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Maintain refrigerated at 2-8 °C for up to 6 months. For long term storage store at -20 °C in small aliquots to prevent freeze-thaw cycles.
Expiry Date:	6 months

Images



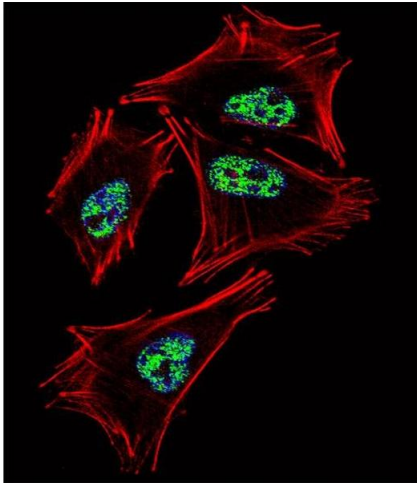
Western Blotting

Image 1. Western blot analysis of lysates from , rat PC-12 cell line (from left to right), using PROX1 Antibody (C-term) (ABIN388776 and ABIN2839111). (ABIN388776 and ABIN2839111) was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20 µg per lane.



Western Blotting

Image 2. Anti-PROX1 Antibody (C-term) at 1:2000 dilution + HepG2 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.



Immunofluorescence

Image 3. Fluorescent confocal image of cell stained with PROX1 Antibody (C-term) (ABIN388776 and ABIN2839111). cells were fixed with 4 % PFA (20 min), permeabilized with Triton X-100 (0.1 %, 10 min), then incubated with PROX1 primary antibody (1:25, 1 h at 37 °C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37 °C). Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7 units/mL, 1 h at 37 °C). Nuclei were counterstained with DAPI (blue) (10 µg/mL, 10 min). PROX1 immunoreactivity is localized to Nucleus significantly.