

Rabbit PROX1 Polyclonal Antibody | anti-PROX1 antibody

PROX1 Antibody (C-term)

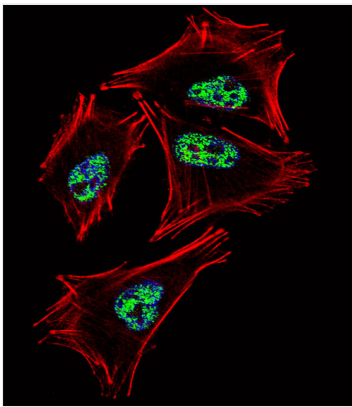
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA284941	Rabbit	Human (Predicted Reactivity: Mouse)	Immunofluorescence, ELISA, Western Blot

PRODUCT SYNONYMS

PROX1; Polyclonal Antibody; PROX1 Antibody (C-term); Prospero homeobox protein 1; Homeobox prospero-like protein PROX1; PROX-1; anti-PROX1 antibody

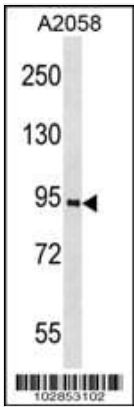
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human (Predicted Reactivity: Mouse)
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	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.
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Concentration	Vial Concentration: 1.9 (varies by lot)
Sequence Positions	492-522
Sequence Length	737
Applicable Applications for anti-PROX1 antibody	IF (Immunofluorescence), ELISA, WB (Western Blot)
Antigen Type	Synthetic Peptide
Antigen Source	HUMAN
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.



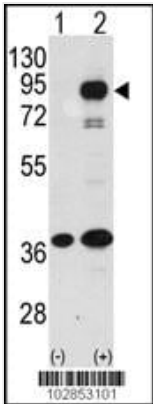
IF (Immunofluorescence)

Fluorescent confocal image of A2058 cell stained with PROX1 Antibody (C-term). A2058 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 degree). For secondary antibody, Alexa Fluor 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37 degree).Cytoplasmic actin was counterstained with Alexa Fluor 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37 degree). Nuclei were counterstained with DAPI (blue) (10 ug/ml, 10 min). PROX1 immunoreactivity is localized to Nucleus significantly.



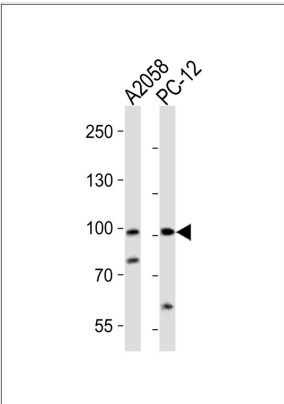
WB (Western Blot)

PROX1 Antibody (K507) western blot analysis in A2058 cell line lysates (35ug/lane).This demonstrates the PROX1 antibody detected the PROX1 protein (arrow).



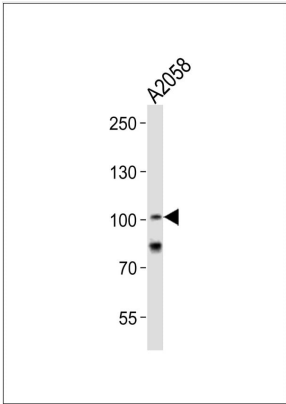
WB (Western Blot)

Western blot analysis of PROX1 (arrow) using rabbit polyclonal PROX1 Antibody.293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the PROX1 gene (Lane 2) (Origene Technologies).



WB (Western Blot)

Western blot analysis of lysates from A2058, rat PC-12 cell line (from left to right), using PROX1 Antibody (C-term). AAA284941 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 20ug per lane.



WB (Western Blot)

Western blot analysis of lysate from A2058 cell line, using PROX1 Antibody (C-term). AAA284941 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.

ADDITIONAL INFORMATION

Related Product Information for anti-PROX1 antibody	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.
Product Categories/Family for anti-PROX1 antibody	Cardiovascular ; Neuroscience
References	Nagai, H., et al., Genes Chromosomes Cancer 38(1):13-21 (2003). Dyer, M.A., et al., Nat. Genet. 34(1):53-58 (2003). Hong, Y.K., et al., Dev. Dyn. 225(3):351-357 (2002). Petrova, T.V., et al., EMBO J. 21(17):4593-4599 (2002). Mouta Carreira, C., et al., Cancer Res. 61(22):8079-8084 (2001).

NCBI AND UNIPROT INFORMATION

NCBI GI #	397174762
NCBI GeneID	5629
NCBI Accession #	NP_001257545.1 ; NP_002754.2
NCBI GenBank Nucleotide #	NM_001270616.1
UniProt Accession #	Q92786 ; Q5SW76 ; Q8TB91 ; A6NK29 ; A8K2B1
Molecular Weight	83203
NCBI Official Full Name	prospero homeobox protein 1
NCBI Official Synonym Full Names	prospero homeobox 1
NCBI Official Symbol	PROX1
NCBI Protein Information	prospero homeobox protein 1
UniProt Protein Name	Prospero homeobox protein 1
UniProt Gene Name	PROX1
UniProt Synonym Gene Names	PROX-1
UniProt Entry Name	PROX1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/prox1-antibody-immunofluorescence-western-blot-elisa/284941>