

# Product Datasheet

## Prox1 Antibody (5G10) - BSA Free NBP1-30045

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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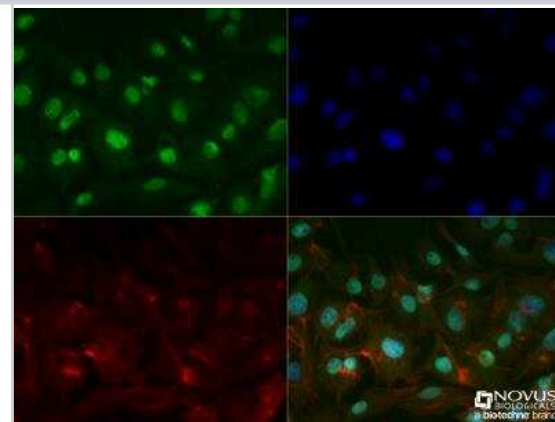
**NBP1-30045**

Prox1 Antibody (5G10) - BSA Free

Product Information	
Unit Size	0.1 ml
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	5G10
Preservative	0.02% Sodium Azide
Isotype	IgG1
Purity	Protein G purified
Buffer	PBS
Product Description	
Host	Mouse
Gene ID	5629
Gene Symbol	PROX1
Species	Human, Mouse, Rat, Chicken
Reactivity Notes	It is expected to work with all vertebrates including mammals, birds and fish. Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Additional Mouse on Mouse blocking steps may be required for IHC and ICC experiments. Please contact Technical Support for more information.
Immunogen	The highly conserved Homeo and Prospero domain of human Prox1. [UniProt# Q92786]
Product Application Details	
Applications	ELISA, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, CyTOF-ready, Immunohistochemistry Whole-Mount
Recommended Dilutions	Flow Cytometry, ELISA, Immunohistochemistry 1:10-1:500, Immunocytochemistry/ Immunofluorescence 1:200, Immunohistochemistry-Paraffin 1:100-1:1000, Immunohistochemistry Whole-Mount reported in scientific literature (PMID 24654984), CyTOF-ready
Application Notes	This antibody is CyTOF ready.

**Images**

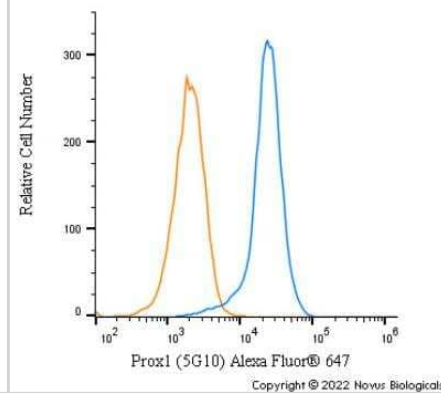
Immunocytochemistry/Immunofluorescence: Prox1 Antibody (5G10) [NBP1-30045] - HepG2 cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X TBS + 0.5% Triton-X100. The cells were incubated with anti-PROX1 (5G10) NBP1-30045 at a 1:200 dilution overnight at 4C and detected with anti-mouse Dylight 488 (Green) at a 1:500 dilution. Actin was counterstained with Phalloidin 568 (Red) at a 1:200 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



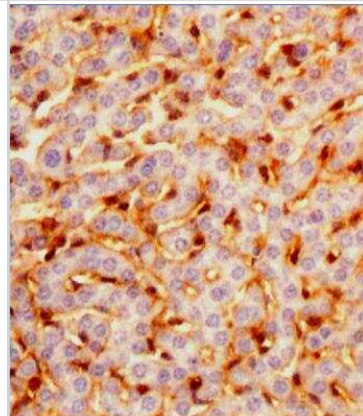
Immunohistochemistry: Prox1 Antibody (5G10) [NBP1-30045] - Rat dentate gyrus showing specific immunolabeling of the prox1 protein. Photo courtesy of Justin Kievits and Teresa Milner, Weill Cornell Medical College.



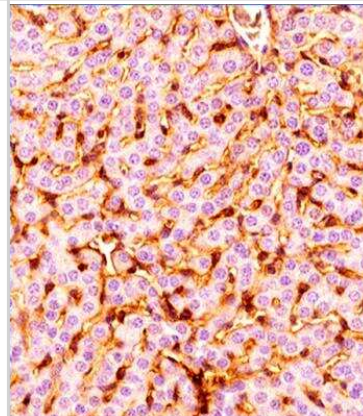
Flow Cytometry: Prox1 Antibody (5G10) [NBP1-30045] - An intracellular stain was performed on HepG2 cells with Prox1 [5G10] Antibody NBP1-30045AF647 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 2.5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Alexa Fluor 647.



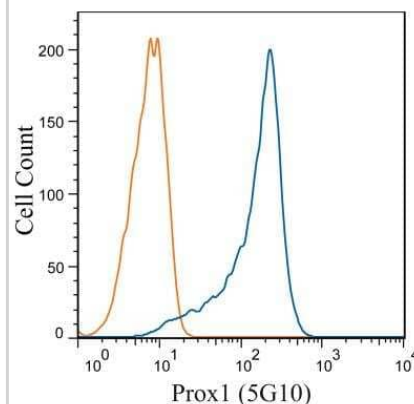
Immunohistochemistry-Paraffin: Prox1 Antibody (5G10) [NBP1-30045] - IHC analysis of a formalin fixed paraffin embedded tissue section of Mouse liver using Lot UD1009o of PROX1 antibody clone 5G10 at 1:100 dilution with HRP-DAB detection and hematoxylin counterstaining. The antibody generated nice nuclear-cytoplasmic staining in sinusoidal endothelial cells as well as in Kupffer cells.



Immunohistochemistry-Paraffin: Prox1 Antibody (5G10) [NBP1-30045] - IHC analysis of a formalin fixed paraffin embedded tissue section of Mouse liver using Lot A of PROX1 antibody clone 5G10 at 1:100 dilution with HRP-DAB detection and hematoxylin counterstaining. The antibody generated nice nuclear-cytoplasmic staining in sinusoidal endothelial cells as well as in Kupffer cells.



Flow Cytometry: Prox1 Antibody (5G10) [NBP1-30045] - HepG2 cells were stained with Prox1 (5G10) NBP1-30045 (blue) and a matched isotype control NBP2-27287 (orange). Cells were fixed with 4% PFA and then permeablized with 0.1% saponin. Cells were incubated in an antibody dilution of 1 ug/mL for 30 minutes at room temperature, followed by Dylight488-conjugated anti-mouse secondary antibody.



## Publications

Iskusnykh IY, Fattakhov N, Li Y et al. Lmx1a is a master regulator of the cortical hem Elife 2023-09-19 [PMID: 37725078]

Wang T, Wang Z, de Fabritus L Et al. 1-deoxysphingolipids bind to COUP-TF to modulate lymphatic and cardiac cell development Developmental cell 2021-11-22 [PMID: 34762852]

Taira Y, Ikuta Y, Inamori S et al. The formation of multiple pituitary pouches from the oral ectoderm causes ectopic lens development in hedgehog signaling-defective avian embryos Dev. Dyn. 2020-07-07 [PMID: 32633438]

Baptista AP, Gola A, Huang Y et al. Human organotypic lymphatic vessel model elucidates microenvironment-dependent signaling and barrier function Biomaterials 2019-05-25 [PMID: 31154151] (FLOW, Human)

Sweat RS, Sloas DC, Murfee WL. VEGF-C Induces Lymphangiogenesis and Angiogenesis in the Rat Mesentery Culture Model. Microcirculation 2014-03-22 [PMID: 24654984] (IHC-WhMt, Rat)



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### **Products Related to NBP1-30045**

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HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)
NBP1-30045R	Prox1 Antibody (5G10) [DyLight 550]

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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