

ARG42020 anti-Prox 1 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Prox 1
Tested Reactivity	Hu
Tested Application	ICC/IF, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Prox 1
Species	Human
Immunogen	KLH-conjugated synthetic peptide between aa. 492-522 of Human Prox 1.
Conjugation	Un-conjugated
Alternate Names	Prospero homeobox protein 1; Homeobox prospero-like protein PROX1; PROX-1

Application Instructions

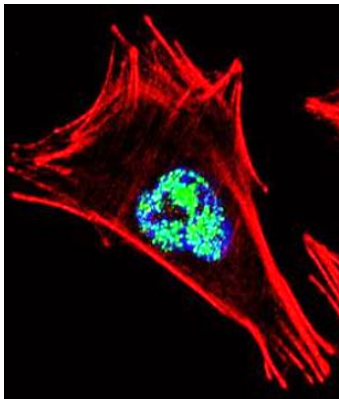
Application table	Application	Dilution
	ICC/IF	1:10 - 1:50
	WB	1:500
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HepG2	
Observed Size	~ 90 kDa	

Properties

Form	Liquid
Purification	Saturated ammonium sulfate precipitation followed by dialysis against PBS.
Buffer	PBS and 0.09% (W/V) Sodium azide.
Preservative	0.09% (W/V) Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

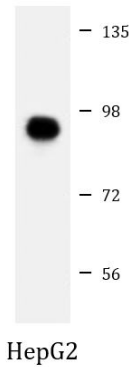
Gene Symbol	PROX1
Gene Full Name	prospero homeobox 1
Background	The protein encoded by this gene is a member of the homeobox transcription factor family. Members of this family contain a homeobox domain that consists of a 60-amino acid helix-turn-helix structure that binds DNA and RNA. The protein encoded by this gene is conserved across vertebrates and may play an essential role during development. Altered levels of this protein have been reported in cancers of different organs, such as colon, brain, blood, breast, pancreas, liver and esophagus. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2012]
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 RORG, transcriptional activator activity of RORA and RORG and the expression of RORA/G-target genes including core clock components: ARNTL/BMAL1, NPAS2 and CRY1 and metabolic genes: AVPR1A and ELOVL3. [UniProt]
Research Area	Cell Biology and Cellular Response antibody; Gene Regulation antibody; Neuroscience antibody; Hippocampal Neurogenesis Marker antibody; Intermediate Progenitor Cells Marker antibody
Calculated Mw	83 kDa
Cellular Localization	Nucleus. Note=RORG promotes its nuclear localization. [UniProt]

Images



ARG42020 anti-Prox 1 antibody ICC/IF image

Immunofluorescence: A2058 cells were fixed with 4% PFA for 20 min, permeabilized with 0.1% Triton X-100 for 10 min, then stained with ARG42020 anti-Prox 1 antibody (green) at 1:25 dilution for 1 hour at 37°C. Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin. DAPI (blue) for nuclear staining.



ARG42020 anti-Prox 1 antibody WB image

Western blot: 20 µg of HepG2 whole cell lysate stained with ARG42020 anti-Prox 1 antibody at 1:2000 dilution.