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Anti-PROX1 Antibody
Catalog # ABO11539

Specification

Anti-PROX1 Antibody - Product Information

Application	**WB**
Primary Accession	Q92786
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Prospero homeobox protein 1(PROX1) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-PROX1 Antibody - Additional Information

Gene ID 5629

Other Names
Prospero homeobox protein 1, Homeobox prospero-like protein PROX1, PROX-1, PROX1

Calculated MW
83203 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization
Nucleus . RORG promotes its nuclear localization. .

Tissue Specificity
Most actively expressed in the developing lens. Detected also in embryonic brain, lung, liver and kidney. In adult, it is more abundant in heart and liver than in brain, skeletal muscle, kidney and pancreas. .

Protein Name
Prospero homeobox protein 1

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence in the middle region of human PROX1(346-359aa KHLAETLKQELNTA), identical to the related mouse and rat sequences.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage

At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities
Belongs to the Prospero homeobox family.

Anti-PROX1 Antibody - Protein Information

Name PROX1

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: BMAL1, NPAS2 and CRY1 and metabolic genes: AVPR1A and ELOVL3.

Cellular Location
Nucleus {ECO:0000250|UniProtKB:P48437}. Note=RORG promotes its nuclear localization. {ECO:0000250|UniProtKB:P48437}

Tissue Location
Most actively expressed in the developing lens. Detected also in embryonic brain, lung, liver and kidney. In adult, it is more abundant in heart and liver than in brain, skeletal muscle, kidney and pancreas.

Anti-PROX1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-PROX1 Antibody - Images

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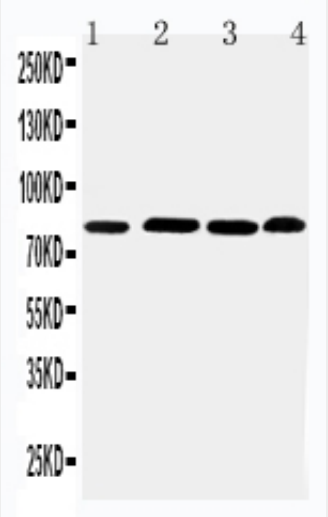

Anti-PROX1 antibody, ABO11539, Western blottingLane 1: Rat Thymus Tissue LysateLane 2: HELA Cell LysateLane 3: JURKAT Cell LysateLane 4: MM231 Cell Lysate

Anti-PROX1 Antibody - Background

Prospero homeobox protein 1, also called PROX1 is a protein that in humans is encoded by the PROX1 gene. This gene is mapped to 1q32.3. 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.