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Phospho-PROX1(S514) Antibody Blocking peptide
Synthetic peptide
Catalog # BP3671a

Specification

Phospho-PROX1(S514) Antibody Blocking peptide - Product Information

Primary Accession	Q92786
Other Accession	NP_002754

Phospho-PROX1(S514) Antibody Blocking peptide - Additional Information

Gene ID 5629

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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP3671a was selected from the region of human Phospho-PROX-1-S514. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Phospho-PROX1(S514) Antibody Blocking peptide - 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.

Phospho-PROX1(S514) Antibody Blocking peptide - Protocols

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

- Blocking Peptides

Phospho-PROX1(S514) Antibody Blocking peptide - Images

Phospho-PROX1(S514) Antibody Blocking peptide - Background

Prox1 is a prospero-related homeobox gene. Its expression pattern suggests it has a role in a variety of embryonic tissues and may play a fundamental role in early development of the CNS. It may regulate gene expression and the development of postmitotic undifferentiated young neurons.

Phospho-PROX1(S514) Antibody Blocking peptide - References

Ingelsson,E., et.al., Diabetes (2010) In pressHerbeck,J.T., et.al., J. Infect. Dis. 201 (4), 618-626 (2010)