

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

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

Primary Accession [O92786](#)  
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 RORγ, transcriptional activator activity of RORα and RORγ and the expression of RORα/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=RORγ 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)