

**PROX1 Blocking Peptide (Center)**

Synthetic peptide

Catalog # BP21201c

**Specification**

---

**PROX1 Blocking Peptide (Center) - Product Information**

Primary Accession

[Q92786](#)**PROX1 Blocking Peptide (Center) - 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 is selected from aa 444-458 of HUMAN PROX1

**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.

**PROX1 Blocking Peptide (Center) - 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.

### **PROX1 Blocking Peptide (Center) - Protocols**

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

- [Blocking Peptides](#)

### **PROX1 Blocking Peptide (Center) - Images**

### **PROX1 Blocking Peptide (Center) - Background**

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 ROR $\gamma$ , transcriptional activator activity of RORA and ROR $\gamma$  and the expression of RORA/G-target genes including core clock components: ARNTL/BMAL1, NPAS2 and CRY1 and metabolic genes: AVPR1A and ELOVL3.

### **PROX1 Blocking Peptide (Center) - References**

Zinovieva R.D., et al. Genomics 35:517-522(1996).  
Ota T., et al. Nat. Genet. 36:40-45(2004).  
Gregory S.G., et al. Nature 441:315-321(2006).  
Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.  
Elsir T., et al. Cancer Metastasis Rev. 31:793-805(2012).