

**PITX2 Antibody (C-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP1429b**

**Specification**

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**PITX2 Antibody (C-term) Blocking peptide - Product Information**

Primary Accession [Q99697](#)

**PITX2 Antibody (C-term) Blocking peptide - Additional Information**

**Gene ID** 5308

**Other Names**

Pituitary homeobox 2, ALL1-responsive protein ARP1, Homeobox protein PITX2, Paired-like homeodomain transcription factor 2, RIEG bicoid-related homeobox transcription factor, Solurshin, PITX2, ARP1, RGS, RIEG, RIEG1

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP1429b](/product/products/AP1429b) was selected from the C-term region of human Pitx2. 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.

**PITX2 Antibody (C-term) Blocking peptide - Protein Information**

**Name** PITX2 ([HGNC:9005](#))

**Function**

May play a role in myoblast differentiation. When unphosphorylated, associates with an ELAVL1-containing complex, which stabilizes cyclin mRNA and ensuring cell proliferation. Phosphorylation by AKT2 impairs this association, leading to CCND1 mRNA destabilization and progression towards differentiation.

**Cellular Location**

Nucleus. Cytoplasm {ECO:0000250|UniProtKB:P97474}

## **PITX2 Antibody (C-term) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

## **PITX2 Antibody (C-term) Blocking peptide - Images**

## **PITX2 Antibody (C-term) Blocking peptide - Background**

Pitx2 is a member of the RIEG/PITX homeobox family, which is in the bicoid class of homeodomain proteins. This protein acts as a transcription factor and regulates procollagen lysyl hydroxylase gene expression. It plays a role in the terminal differentiation of somatotroph and lactotroph cell phenotypes, is involved in the development of the eye, tooth and abdominal organs, and acts as a transcriptional regulator involved in basal and hormone-regulated activity of prolactin. Mutations in this protein are associated with Axenfeld-Rieger syndrome, iridogoniodysgenesis syndrome, and sporadic cases of Peters anomaly. A similar protein in other vertebrates is involved in the determination of left-right asymmetry during development.

## **PITX2 Antibody (C-term) Blocking peptide - References**

Engenheiro,E., Clin. Genet. 72 (5), 464-470 (2007)Gudbjartsson,D.F., Nature 448 (7151), 353-357 (2007)Lowry,R.B., Am. J. Med. Genet. A 143 (11), 1227-1230 (2007)