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

Specification

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 was selected from the C-term region of human Pilx2. 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}

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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

Pilx2 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)