

PITX2 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14021a

Specification

PITX2 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	Q99697
Other Accession	NP_700476.1 , NP_700475.1 , NP_000316.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	35370
Antigen Region	42-71

PITX2 Antibody (N-term) - 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

This PITX2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 42-71 amino acids from the N-terminal region of human PITX2.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PITX2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PITX2 Antibody (N-term) - 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

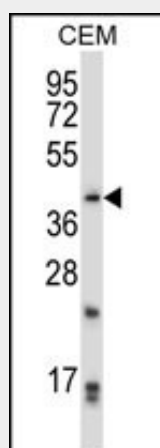
Nucleus. Cytoplasm {ECO:0000250|UniProtKB:P97474}

PITX2 Antibody (N-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PITX2 Antibody (N-term) - Images



PITX2 Antibody (N-term) (Cat. #AP14021a) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the PITX2 antibody detected the PITX2 protein (arrow).

PITX2 Antibody (N-term) - Background

This gene encodes a member of the RIEG/PITX homeobox family, which is in the bicoid class of homeodomain proteins. The encoded protein acts as a transcription factor and regulates procollagen lysyl hydroxylase gene expression. This protein 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 gene 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.

Alternatively spliced transcript variants encoding distinct isoforms have been described.

PITX2 Antibody (N-term) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Banez, L.L., et al. J. Urol. 184(1):149-156(2010)
Kalsi, G., et al. Hum. Mol. Genet. 19(12):2497-2506(2010)
Ellinor, P.T., et al. Nat. Genet. 42(3):240-244(2010)
Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) :