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PITX2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP1429b

Specification

PITX2 Antibody (C-term) - Product Information

Application	**WB, IF,E**
Primary Accession	Q99697
Other Accession	Q9I8K3, Q6QU75, Q9PWR3, Q9R0W1, P97474, Q9W5Z2, O93385
Reactivity	**Human**
Predicted	**Chicken, Zebrafish, Mouse, Rat, Xenopus**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**122-151**

PITX2 Antibody (C-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 122-151 amino acids of human PITX2.

Dilution
WB~~1:2000
IF~~1:10~50
E~~Use at an assay dependent concentration.

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

PITX2 Antibody (C-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.

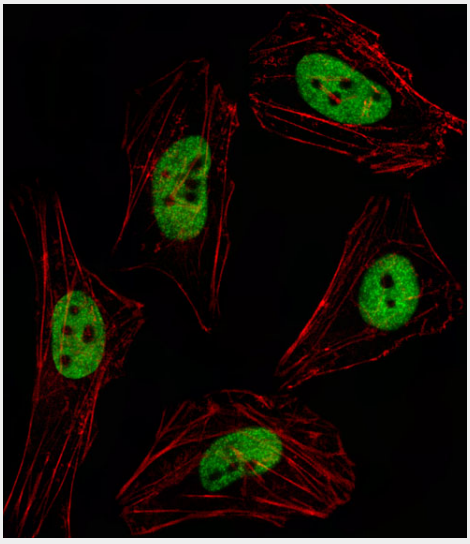
Cellular Location
Nucleus. Cytoplasm {ECO:0000250|UniProtKB:P97474}

PITX2 Antibody (C-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 Cytomety
- Cell Culture

PITX2 Antibody (C-term) - Images



Fluorescent image of Hela cell stained with PITX2 Antibody (C-term)(Cat#AP1429b/SA070209B).Hela cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with PITX2 primary antibody (1:25, 1 h at 37℃). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37℃).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37℃).PITX2 immunoreactivity is localized to Nucleus significantly.

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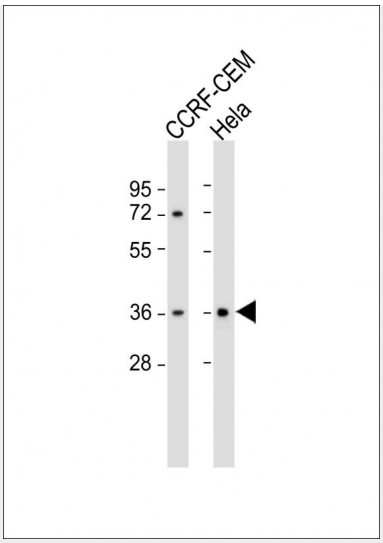
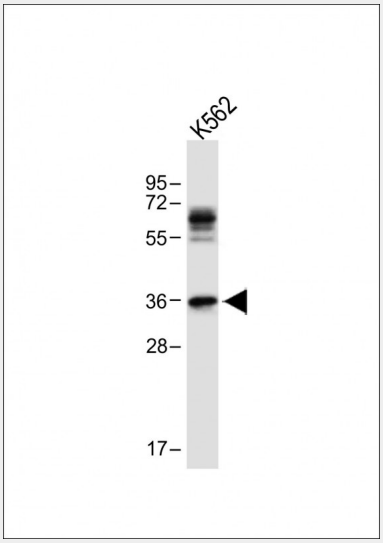


All lanes : Anti-Pilx2 (Human C-term) at 1:2000 dilution Lane 1: CCRF-CEM whole cell lysate Lane 2: Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 35 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Anti-Pilx2 (Human C-term) at 1:2000 dilution + K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 35 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

PITX2 Antibody (C-term) - 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) - 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)