

PITX2 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1429b

Specification

PITX2 Antibody (C-term) - Product Information

Application	IF, WB,E
Primary Accession	Q99697
Other Accession	Q9I8K3 , Q6QU75 , Q9PWR3 , Q9R0W1 , P97474 , Q9W5Z2 , Q93385
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

IF~~1:10~50
WB~~1:2000

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

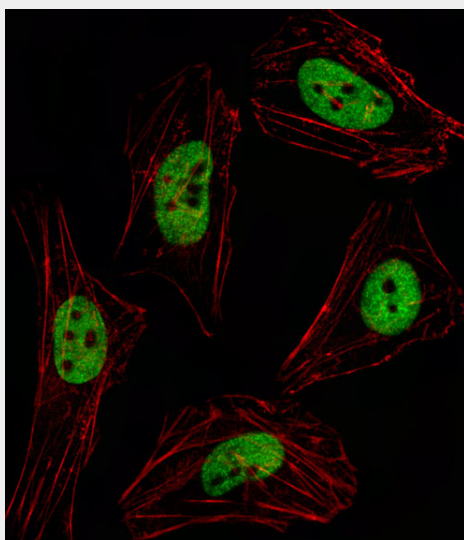
Nucleus. Cytoplasm {ECO:0000250|UniProtKB:P97474}

PITX2 Antibody (C-term) - Protocols

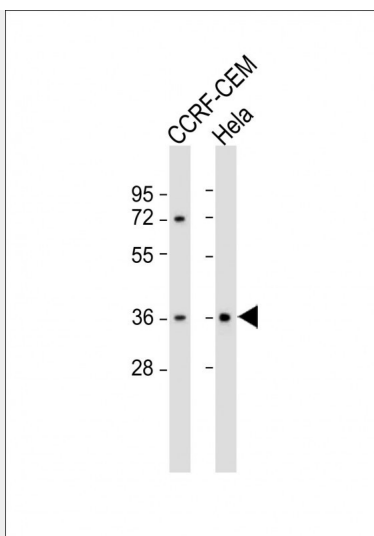
Provided below are standard protocols that you may find useful for product applications.

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

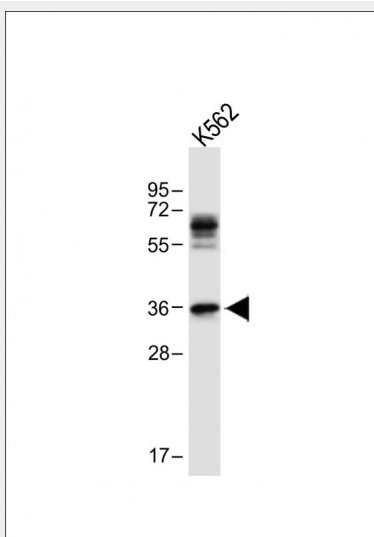
PITX2 Antibody (C-term) - Images



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°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C).PITX2 immunoreactivity is localized to Nucleus significantly.



All lanes : Anti-Pitx2 (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-Pitx2 (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

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) - 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)