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PITX2 Rabbit pAb

Catalog # AP96310

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q3KQX9
Other Accession	Q3KQX9
Reactivity	Human, Mouse
Predicted	Rat, Rabbit, Chicken, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PITX2
Epitope Specificity	241-317/317
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus.
SIMILARITY	Belongs to the paired homeobox family. Bicoid subfamily.Contains 1 homeobox DNA-binding domain.
Post-translational modifications	Phosphorylation at Thr-90 impairs its association with the CCND1 mRNA-stabilizing complex thus shortening the half-life of CCND1.
DISEASE	Defects in PITX2 are the cause of Axenfeld-Rieger syndrome type 1 (RIEG1) [MIM:180500]; also known as Rieger syndrome type 1. RIEG1 is an autosomal dominant defect characterized by hypodontia (partial anodontia), anal stenosis, hypertelorism, mental deficiency, agenesis of the facial bones, with malformation of the anterior chamber of the eye. Defects in PITX2 are the cause of iridogoniodysgenesis type 2 (IRID2) [MIM:137600]; also known as iridogoniodysgenesis syndrome 2 (IGDS2). It is an autosomal dominant inherited disease. Defects in PITX2 are a cause of Peters anomaly (PAN) [MIM:604229]. It is a congenital defect of the anterior chamber of the eye. Defects in PITX2 are associated with ring dermoid of cornea (RDC) [MIM:180550]. RDC is an autosomal dominantly inherited syndrome characterized by bilateral annular limbal dermoids with corneal and conjunctival extension.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Pitx2 also regulates lung symmetry by encoding “leftness” of the lung. Pitx2 is asymmetrically expressed in the left lateral-plate mesoderm, and mutant mice with laterality defects show altered patterns of Pitx2 expression that correlate with changes in the visceral symmetry. The genes which encode Pitx1 and Pitx2 map to human chromosomes 5q31 and 4q25-q26, respectively.May play an important role in development and maintenance of anterior structures. Isoform PTX2C is involved in left-right asymmetry the developing embryo.

Additional Information

Gene ID	5308
Other Names	ARP1; ASGD4; Brx1; IDG2; IGDS; IGDS2; IHG2; IRID2; Otlx2; PTX2; RGS; RIEG; RIEG1; RS; Q3KQX9_HUMAN; PITX2_HUMAN; PITX2; ALL1-responsive protein ARP1; Homeobox protein PITX2; Paired-like homeodomain transcription factor 2; RIEG bicoid-related homeobox transcription factor; Solurshin; paired like homeodomain 2; paired-like homeodomain 2
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	PITX2 Rabbit pAb
Function	Controls cell proliferation in a tissue-specific manner and is involved in morphogenesis. During embryonic development, exerts a role in the expansion of muscle progenitors. May play a role in the proper localization of asymmetric organs such as the heart and stomach. Isoform PTX2C is involved in left-right asymmetry the developing embryo.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.