



Rabbit Anti-PITX2 antibody

SL9605R

Product Name:	PITX2
Chinese Name:	成对样同源结构域转录因子2抗体
Alias:	All1 responsive gene 1; ALL1 responsive protein ARP1; ALL1-responsive protein ARP1; ARP 1; ARP1; Brx 1; Brx1; Homeobox protein PITX2; IDG 2; IDG2; IGDS 2; IGDS; IGDS2; IHG 2; IHG2; IRID 2; IRID2; Otlx 2; Otlx2; Paired like homeodomain transcription factor 2; Paired-like homeodomain transcription factor 2; Pituitary homeobox 2; PITX 2; pitx2; PITX2_HUMAN; PTX 2; PTX2; RGS; RIEG 1; RIEG; Rieg bicoid related homeobox transcription factor 1; RIEG bicoid related homeobox transcription factor; RIEG bicoid-related homeobox transcription factor; RIEG1; RS antibody solurshin.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Cow,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	35kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PITX2:241-317/317
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed

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.

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.

Subcellular Location:

Nucleus.

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.

Similarity:

Belongs to the paired homeobox family. Bicoid subfamily.
Contains 1 homeobox DNA-binding domain.

SWISS:

Q3KQX9

Gene ID:

5308

Product Detail:

Database links:

[Entrez Gene: 5308](#)Human

[Omim: 601542](#)Human

[SwissProt: Q3KQX9](#)Human

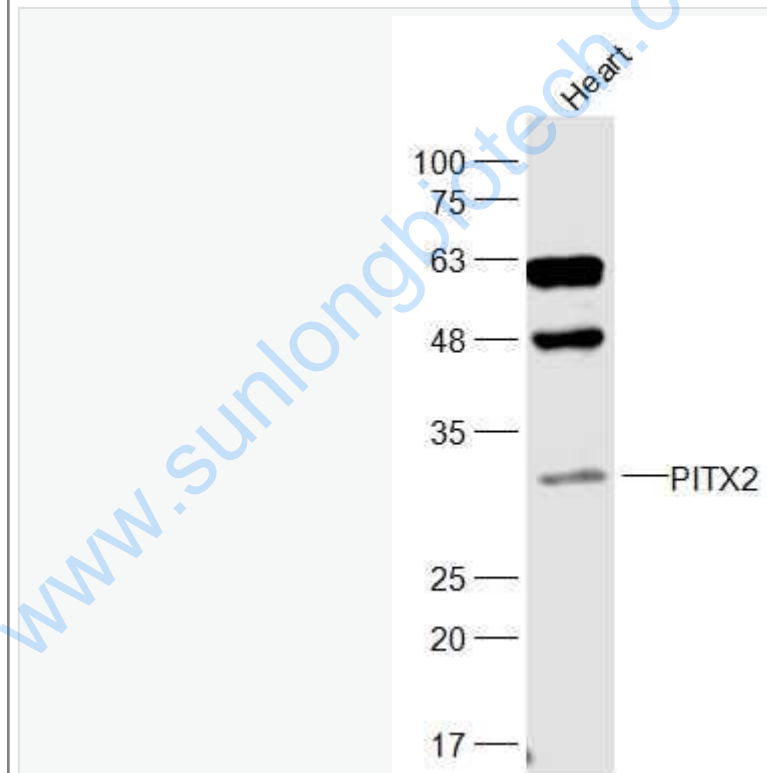
[SwissProt: Q99697](#)Human

[Unigene: 643588](#)Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

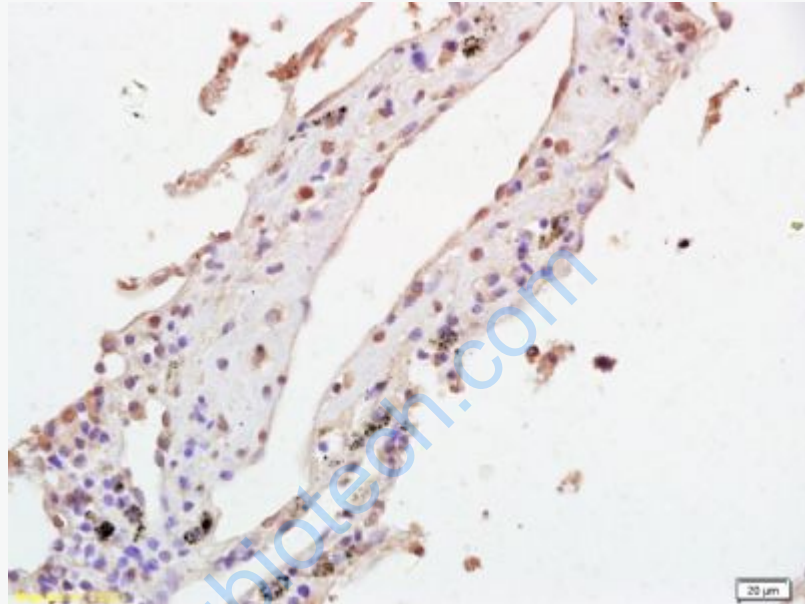
Heart(Mouse) Cell Lysate at 40 ug

Primary: Anti-PITX2 (SL9605R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 35 kD

Observed band size: 30 kD



Tissue/cell: human lung tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block
endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer
(normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-PITX2 Polyclonal Antibody, Unconjugated(SL9605R) 1:200,
overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and
DAB(C-0010) staining