



# Anti-PITX2 (full length) polyclonal antibody (DPAB-DC2257)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Antigen Description</b>	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.
<b>Immunogen</b>	PITX2 (AAH13998, 1 a.a. ~ 324 a.a) full-length recombinant protein with GST tag. The sequence is MNCMKGPLHLEHRAAGTKLSAVSSSSCHHPQPLAMASVLAPGQPRSLDSSKHRLEVHTIS DTSSPEAAEKDKSQGKNEDVGAEDPSKKKRQRRQRTHFTSQQLQELEATFQRNRYPDMS TREEIAVWTNLTEARVRVWFKNRRRAKWRKRERNQQAECKNGFGPQFNGLMQPYDDMYPG YSYNNWAAKGLTSASLSTKSFPFFNSMNVNPLSSQSMFSPPNSSSMSSSMVPSAVTG VPGSSLNSLNNLNNLSSPSLNSAVPTPACPYAPPTPPYVYRDTCNSSLASLRLKAKQHSS FGYASVQNPASNLSACQYAVDRPV
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB (Recombinant protein), ELISA,
<b>Size</b>	50 µl

<b>Buffer</b>	50 % glycerol
<b>Preservative</b>	None
<b>Storage</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">PITX2 paired-like homeodomain 2 [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	PITX2
<b>Synonyms</b>	PITX2; paired-like homeodomain 2; RS; RGS; ARP1; Brx1; IDG2; IGDS; IHG2; PTX2; RIEG; IGDS2; IRID2; Otlx2; RIEG1; pituitary homeobox 2; solurshin; all1-responsive gene 1; homeobox protein PITX2; ALL1-responsive protein ARP1; paired-like homeodomain transcription factor 2; rieg bicoid-related homeobox transcription factor 1;
<b>Entrez Gene ID</b>	<a href="#">5308</a>
<b>Protein Refseq</b>	<a href="#">NP_000316</a>
<b>UniProt ID</b>	<a href="#">Q99697</a>
<b>Chromosome Location</b>	4q25
<b>Pathway</b>	Heart Development; Regulation of Wnt-mediated beta catenin signaling and target gene transcription;
<b>Function</b>	RNA polymerase II activating transcription factor binding; RNA polymerase II core promoter proximal region sequence-specific DNA binding; RNA polymerase II core promoter proximal region sequence-specific DNA binding transcription factor activity involved