

Anti-PITX3 antibody



Description	Unconjugated Rabbit polyclonal to PITX3
Model	STJ190186
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human PITX3 protein.
Immunogen Region	10-90aa
Gene ID	5309
Gene Symbol	PITX3
Dilution range	WB 1:500-2000 ELISA 1:5000-20000
Specificity	PITX3 Polyclonal Antibody detects endogenous levels of protein.
Tissue Specificity	Highly expressed in developing eye lens.
Purification	PITX3 antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Pituitary homeobox 3 Homeobox protein PITX3 Paired-like homeodomain transcription factor 3
Molecular Weight	33 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:9006OMIM:107250
Alternative Names	Pituitary homeobox 3 Homeobox protein PITX3 Paired-like homeodomain transcription factor 3
Function	Transcriptional regulator which is important for the differentiation and maintenance of meso-diencephalic dopaminergic (mdDA) neurons during development. In addition to its importance during development, it also has roles in the long-term survival and maintenance of the mdDA neurons. Activates NR4A2/NURR1-mediated transcription of genes such as SLC6A3, SLC18A2, TH and DRD2 which are essential for development of mdDA neurons. Acts by decreasing the interaction of NR4A2/NURR1 with the corepressor NCOR2/SMRT which acts through histone deacetylases (HDACs) to keep promoters of NR4A2/NURR1 target genes in a repressed deacetylated state. Essential for the normal lens development and differentiation. Plays a critical role in the maintenance of mitotic activity of lens epithelial cells, fiber cell differentiation and in the control of the temporal and spatial activation of fiber cell-specific crystallins. Positively regulates FOXE3 expression and negatively regulates PROX1 in the anterior lens epithelium, preventing activation of CDKN1B/P27Kip1 and CDKN1C/P57Kip2 and thus maintains lens epithelial cells in cell cycle .
Cellular Localization	Nucleus