



Anti-PITX3 (aa 29-40) polyclonal antibody (DPABH-24500)

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

PRODUCT INFORMATION

Antigen Description	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.
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Specificity	DPABH-24500 is not expected to cross-react with PITX1 and PITX2.
Immunogen	Synthetic peptide: PEHGCKGQEHSD, corresponding to internal sequence amino acids 29-40 of Human PITX3 (NP_005020.1).
Isotype	IgG
Source/Host	Goat
Species Reactivity	Human
Purification	Immunogen affinity purified
Conjugate	Unconjugated
Applications	WB

Format	Liquid
Size	100 µg
Buffer	Constituents: 0.5% BSA, Tris buffered saline, pH 7.3
Preservative	0.02% Sodium Azide
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

GENE INFORMATION

Gene Name	PITX3 paired-like homeodomain 3 [Homo sapiens]
Official Symbol	PITX3
Synonyms	PITX3; paired-like homeodomain 3; paired like homeodomain transcription factor 3; pituitary homeobox 3; homeobox protein PITX3; PTX3; CTPP4; MGC12766;
Entrez Gene ID	5309
Protein Refseq	NP_005020
UniProt ID	O75364
Chromosome Location	10q24.32
Function	sequence-specific DNA binding; sequence-specific DNA binding transcription factor activity;