

**PITX3 Antibody**  
**Rabbit mAb**  
**Catalog # AP92616****Specification**

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**PITX3 Antibody - Product Information**

Application	WB, FC, IP
Primary Accession	<a href="#">O75364</a>
Reactivity	Rat
Clonality	Monoclonal
<b>Other Names</b>	
Pitx3; PTX3;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	31832 Da

**PITX3 Antibody - Additional Information**

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human PITX3
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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

**PITX3 Antibody - Protein Information****Name** PITX3**Synonyms** PTX3**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 (By similarity).

**Cellular Location**

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00108, ECO:0000255|PROSITE-ProRule:PRU00138}

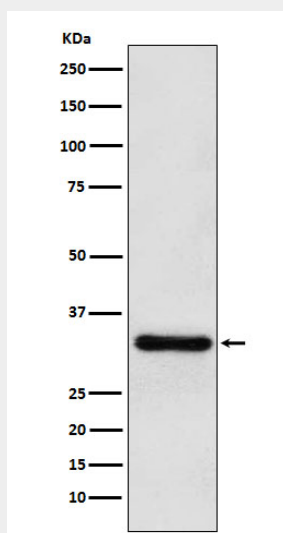
**Tissue Location**

Highly expressed in developing eye lens.

**PITX3 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**PITX3 Antibody - Images**

Western blot analysis of PITX3 expression in U87-MG cell lysate.