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

## Specification

### PITX3 Antibody - Product Information

| | |
|---|---|
| Application | **WB, FC, IP** |
| Primary Accession | O75364 |
| Reactivity | **Rat** |
| Clonality | **Monoclonal** |
| **Other Names** | |
| Pitx3; PTX3; | |
| Isotype | **Rabbit IgG** |
| Host | **Rabbit** |
| Calculated MW | **31832 Da** |

### PITX3 Antibody - Additional Information

| | |
|---|---|
| Dilution | **WB~~1:1000**<br>**FC~~1:10~50**<br>**IP~~N/A** |
| 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}

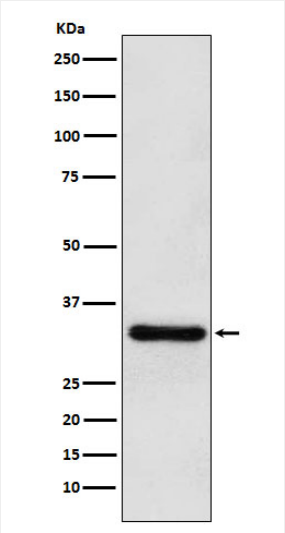
**Tissue Location**
Highly expressed in developing eye lens.

## 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 Cytomety
- Cell Culture

## PITX3 Antibody - Images




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