

# Recombinant Anti-PITX3 Rabbit mAb

Catalog # AP95300

## Product Information

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|-------------------|------------------------|
| Application       | WB, FC, IP             |
| Primary Accession | <a href="#">O75364</a> |
| Reactivity        | Human, Mouse, Rat      |
| Host              | Rabbit                 |
| Clonality         | Monoclonal             |
| Calculated MW     | 31832                  |

## Additional Information

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|--------------------|-------------------------------------------------------------------------------------------------------------------------|
| Gene ID            | 5309                                                                                                                    |
| Other Names        | PTX3; Pituitary homeobox 3; Homeobox protein PITX3; Paired-like homeodomain transcription factor 3                      |
| Target/Specificity | KLH-conjugated synthetic peptide encompassing a sequence within human PITX3 protein. The exact sequence is proprietary. |
| Dilution           | WB~~WB (1/500 - 1/1000) FC~~1:10~50 IP~~N/A                                                                             |
| Format             | Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.                                                   |
| Storage            | Store at -20 °C.Stable for 12 months from date of receipt                                                               |

## Protein Information

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| 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.

## Images

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Western blot analysis of PITX3 expression in U87MG (A) whole cell lysates. (Predicted band size: 32 kD; Observed band size: 32 kD)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.