

PITX3 antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # Al11427

Specification

PITX3 antibody - N-terminal region - Product Information

Application Primary Accession Other Accession Reactivity

Predicted Host Clonality Calculated MW WB <u>O75364</u> <u>NM_005029</u>, <u>NP_005020</u> Human, Mouse, Rat, Rabbit, Pig, Sheep, Horse, Bovine, Dog Human, Mouse, Rat, Rabbit, Pig, Dog Rabbit Polyclonal 32kDa KDa

PITX3 antibody - N-terminal region - Additional Information

Gene ID 5309

Alias Symbol PTX3, CTPP4 Other Names Pituitary homeobox 3, Homeobox protein PITX3, Paired-like homeodomain transcription factor 3, PITX3, PTX3

Format Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-PITX3 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions PITX3 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

PITX3 antibody - N-terminal region - 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 - N-terminal region - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PITX3 antibody - N-terminal region - Images



WB Suggested Anti-PITX3 Antibody Titration: 0.2-1 µg/ml ELISA Titer: 1:1562500 Positive Control: HepG2 cell lysate

PITX3 antibody - N-terminal region - References

Bidinost,C., et al., (2006) Invest. Ophthalmol. Vis. Sci. 47 (4), 1274-1280Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.