10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PITX3 antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI11427

Product Information

Application	WB
Primary Accession	O75364
Other Accession	NM_005029, NP_005020
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Horse, Bovine, Sheep
Predicted	Human, Mouse, Rat, Rabbit, Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	31832

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.

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).

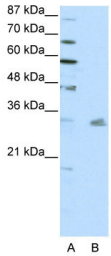
Cellular Location Nucleus {ECO:0000255|PROSITE-ProRule:PRU00108, ECO:0000255|PROSITE-ProRule:PRU00138}

Tissue Location Highly expressed in developing eye lens.

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.

Images



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