Recombinant mouse Pituitary homeobox 3

Catalog No: #AP72721

Package Size: #AP72721-1 20ug #AP72721-2 100ug #AP72721-3 1mg

Orders: order@signalwayantibody.com
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Description

Product Name	Recombinant mouse Pituitary homeobox 3
Brief Description	Recombinant Protein
Host Species	Yeast
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:1-302aaSequence Info:Full Length
Other Names	Homeobox protein PITX3;Paired-like homeodomain transcription factor 3
Accession No.	O35160
Uniprot	O35160
GeneID	18742;
Calculated MW	33.7 kDa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	MEFGLLGEAEARSPALSLSDAGTPHPPLPEHGCKGQEHSDSEKASASLPGGSPEDGSLKKKQRRQRTHFTS QQLQELEATFQRNRYPDMSTREEIAVWTNLTEARVRVWFKNRRAKWRKRERSQQAELCKGGFAAPLGGLVP PYEEVYPGYSYGNWPPKALAPPLAAKTFPFAFNSVNVGPLASQPVFSPPSSIAASMVPSAAAAPGTVPGPGA LQGLGGAPPGLAPAAVSSGAVSCPYASAAAAAAAAASSPYVYRDPCNSSLASLRLKAKQHASFSYPAVPGPP PAANLSPCQYAVERPV
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

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 tporal 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.

References

Induction of tyrosine hydroxylase expression by the transcription factor Pitx3.Messmer K., Remington M.P., Skidmore F., Fishman P.S.Int. J. Dev. Neurosci. 25:29-37(2007)Research Topic:Others

Note: This product is for in vitro research use only