



Recombinant Mouse Pituitary homeobox 3 (Pitx3)

Product Code	CSB-EP018044MO
Relevance	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.
Abbreviation	Recombinant Mouse Pitx3 protein
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.
Uniprot No.	O35160
Alias	Homeobox protein PITX3;Paired-like homeodomain transcription factor 3
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MEFGLLGAEARSPALSLSDAGTPHPPLPEHGCKGQEHSDSEKASASLPGGS PEDGSLKKKQRRQRTHFTSQQLQELEATFQRNRYPD MSTREEIAVWTNLTEA RVRVWFKNRRRAKWRKRERSQQAELCKGGFAAPLGGLVPPYEEVYPGYSYGN WPPKALAPPLAAKTFPFAFNSVNVGGLASQPVFSPSSIAASMVPSAAAAPGT VPGPGALQGLGGAPPGLAPAAVSSGAVSCPYASAAAAAAAASSPYVYRDPC NSSLASLRLKAKQHASFSPAVPGPPPAANLSPCQYAVERPV
Research Area	Others
Source	E.coli
Target Names	Pitx3
Expression Region	1-302aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

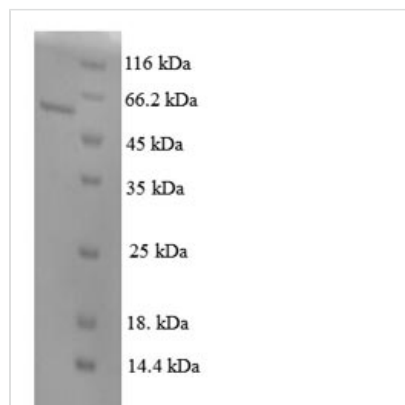


Tag Info N-terminal GST-tagged

Mol. Weight 58.7kDa

Protein Length Full Length

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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