



# Recombinant Rat Pituitary homeobox 2 (Pitx2)

<b>Product Code</b>	CSB-YP882606RA
<b>Abbreviation</b>	Pitx2
<b>Storage</b>	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.
<b>Uniprot No.</b>	Q9R0W1
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Rattus norvegicus (Rat)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	MNCMKGPLPL EHRAAGTKLS AASSPFCHHT QALAMASVLA PGQPRSLDAS KHRLEVHTIS DTSSPEVAEK DKGQQGKNED VGAEDPSKKK RQRRQRTHFT SQQLQELEAT FQRNRYPDMS TREEIAVWTN LTEARVRVWF KNRRAKWRKR ERNQQAELCK NGFGPQFNGL MQPYDDMYPG YSYNNWAAKG LTSASLSTKS FPFNSMNVN PLSSQSMFSP PNSISSMSMS SSMVPSAVTG VPGSSLNSLN NLNNLSSPSL NSAVPTACP YAPPTPPYVY RDTCNSSLAS LRLKAKQHSS FGYASVQNPA SNLSACQYAV DRPV
<b>Source</b>	Yeast
<b>Target Names</b>	Pitx2
<b>Protein Names</b>	Recommended name: Pituitary homeobox 2 Alternative name(s): Homeobox protein PITX2 Paired-like homeodomain transcription factor 2 rPtx2
<b>Expression Region</b>	1-324
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	full length protein
<b>Target Details</b>	This gene encodes a member of the RIEG/PITX homeobox family, which is in the bicoid class of homeodomain proteins. The encoded protein acts as a transcription factor and regulates procollagen lysyl hydroxylase gene expression. This protein plays a role in the terminal differentiation of somatotroph and lactotroph cell phenotypes, is involved in the development of the eye, tooth and abdominal organs, and acts as a transcriptional regulator involved in basal and hormone-regulated activity of prolactin. Mutations in this gene are associated with Axenfeld-Rieger syndrome, iridogoniodysgenesis syndrome, and sporadic cases of Peters anomaly. A similar protein in other vertebrates is involved in the determination of left-right asymmetry during development. Alternatively spliced transcript variants encoding distinct isoforms have been described.
<b>Reconstitution</b>	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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