

Product datasheet for **SC329749**

PITX2 (NM_001204399) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PITX2 (NM_001204399) Human Untagged Clone
Tag:	Tag Free
Symbol:	PITX2
Synonyms:	ARP1; ASGD4; Brx1; IDG2; IGDS; IGDS2; IHG2; IRID2; Otlx2; PTX2; RGS; RIEG; RIEG1; RS
Vector:	pCMV6-Entry (PS100001)
Fully Sequenced ORF:	>SC329749 representing NM_001204399. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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ATGGAGACCAACTGCCGCAAACTGGTGTGCGCGTGTGTGCAATTAGAGAAAGATAAAAGCCAGCAGGGG
AAGAATGAGGACGTGGGCGCCGAGGACCCGTCTAAGAAGAAGCGGCAAAGCGGCAGCGGACTCACTTT
ACCAGCCAGCAGCTCCAGGAGCTGGAGGCCACTTCCAGAGGAACCGCTACCCGGACATGTCCACACGC
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GGGCTCATGCAGCCCTACGACGACATGTACCCAGGCTATTCTACAACAACCTGGGCCGCCAAGGGCCTT
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CAGAGCATGTTTTCCCCACCAACTCTATCTCGTCCATGAGCATGTCTGTCAGCATGGTGCCTCAGCA
GTGACAGGCGTCCCGGGCTCCAGTCTCAACAGCCTGAATAACTTGAACAACCTGAGTAGCCCGTCGCTG
AATTCGCGGTGCCGACGCTGCCTGTCTTACGCGCCGCGACTCCTCCGTATGTTTATAGGGACACG
TGTAACCTCGAGCCTGGCCAGCCTGAGACTGAAAGCAAAGCAGCACTCCAGCTTCGGCTACGCCAGCGTG
CAGAACCCGGCCTCAACCTGAGTGCTTGCCAGTATGCAGTGGACCGGCCGTGA

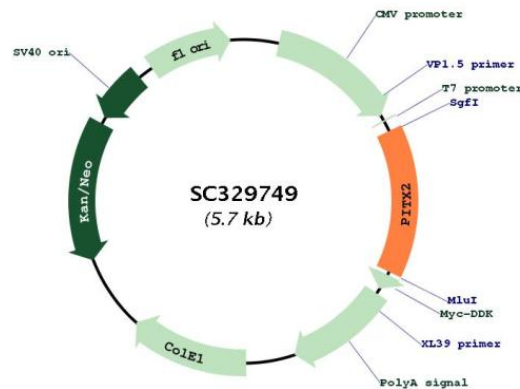
```

Restriction Sites: SgfI-MluI



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Plasmid Map:



ACCN: NM_001204399

Insert Size: 816 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_001204399.1](#)

RefSeq Size: 1736 bp

RefSeq ORF: 816 bp

Locus ID: 5308

UniProt ID: [Q99697](#)

Cytogenetics: 4q25

Protein Families: Transcription Factors

Protein Pathways: TGF-beta signaling pathway

MW: 30.3 kDa

Gene Summary: 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. [provided by RefSeq, Jul 2008]
Transcript Variant: This variant (6) lacks an exon in the 5' UTR and an in-frame exon in the 5' CDS, as compared to variant 2. The resulting isoform (a) lacks an internal segment, as compared to isoform b. Variants 1 and 6 encode the same isoform a.