

Product datasheet for SC306602

PITX2 (NM_153427) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PITX2 (NM_153427) Human Untagged Clone
Tag:	Tag Free
Symbol:	PITX2
Synonyms:	ARP1; ASGD4; Brx1; IDG2; IGDS; IGDS2; IHG2; IRID2; Otlx2; PTX2; RGS; RIEG; RIEG1; RS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC306602 representing NM_153427. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC GCGATCGCC
ATGGAGACCAACTGCCGAAACTGGTGTGCGCGTGTGTGCAATTAGAGAAAGATAAAAGCCAGCAGGGG
AAGAATGAGGACGTGGGCGCCGAGGACCCGTCTAAGAAGAAGCGGCAAAGCGGCAGCGGACTCACTTT
ACCAGCCAGCAGCTCCAGGAGCTGGAGGCCACTTTCCAGAGGAACCGCTACCCGGACATGTCCACACGC
GAAGAAATCGCTGTGTGGACCAACCTTACGGAAGCCCGAGTCCGGGTTTGGTTCAAGAATCGTCGGGCC
AAATGGAGAAAGAGGGAGCGCAACCAGCAGGCCGAGCTATGCAAGAATGGCTTCGGGCCGAGTTCAAT
GGGCTCATGCAGCCCTACGACGACATGTACCCAGGCTATTCTACAACAACCTGGGCGCCAAGGGCCTT
ACATCCGCTCCCTATCCACCAAGAGCTTCCCCTTCTTCAACTCTATGAACGTCAACCCCTGTCA
CAGAGCATGTTTTCCCCACCAACTCTATCTCGTCCATGAGCATGTCTGTCAGCATGGTGCCTCAGCA
GTGACAGGCGTCCCGGGCTCCAGTCTCAACAGCCTGAATAACTTGAACAACCTGAGTAGCCCGTCGCTG
AATCCGCGGTGCCGACGCTGCCTGTCTTACGCGCCGCGACTCCTCCGTATGTTTATAGGGACAG
TGTAACCTCGAGCCTGGCCAGCCTGAGACTGAAAGCAAAGCAGCACTCCAGCTTCGGCTACGCCAGCGTG
CAGAACC CGCC TCAACCTGAGTGCTTGCCAGTATGCAGTGGACCGGCCGT TGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC
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Restriction Sites:	Sgfl-MluI
Plasmid Map:	□
ACCN:	NM_153427
Insert Size:	816 bp



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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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<ol style="list-style-type: none">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_153427.2
RefSeq Size:	3110 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:	<p>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]</p> <p>Transcript Variant: This variant (1), also known as ARP1a, lacks an in-frame exon in the 5' region, 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.</p>