

### Product datasheet for RC204179L1

#### OriGene Technologies, Inc.

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## PITX2 (NM\_000325) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** PITX2 (NM\_000325) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: PITX2

Synonyms: ARP1; ASGD4; Brx1; IDG2; IGDS; IGDS2; IHG2; IRID2; Otlx2; PTX2; RGS; RIEG; RIEG1; RS

Mammalian Cell None

Selection:

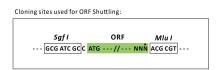
Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC204179).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_000325

ORF Size: 972 bp





#### PITX2 (NM\_000325) Human Tagged Lenti ORF Clone - RC204179L1

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**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:** <u>NM 000325.4</u>

RefSeq Size:2337 bpRefSeq ORF:975 bpLocus ID:5308

UniProt ID: Q99697

Cytogenetics: 4q25

**Domains:** homeobox, OAR

**Protein Families:** Transcription Factors

**Protein Pathways:** TGF-beta signaling pathway

MW: 35.8 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

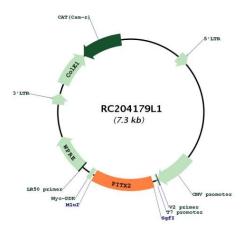
development of the eye, tooth and abdominal organs, and acts as a transcriptional regulator involved in basal and hormone-regulated activity of prolactin. Mutations in this gene are associated with Axenfeld-Rieger syndrome, iridogoniodysgenesis syndrome, and sporadic

cases of Peters anomaly. A similar protein in other vertebrates is involved in the

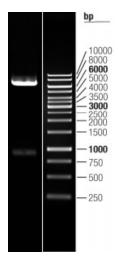
determination of left-right asymmetry during development. Alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq, Jul 2008]



# **Product images:**



Circular map for RC204179L1



Double digestion of RC204179L1 using Sgfl and Mlul  $\,$