

## **Product datasheet for SC331632**

## PBX1 (NM 001204961) Human Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

Product Name: PBX1 (NM\_001204961) Human Untagged Clone

Tag: Tag Free Symbol: PBX1

Synonyms: CAKUHED

**Vector:** pCMV6-Entry (PS100001)

Fully Sequenced ORF: >SC331632 representing NM\_001204961.

**ATACAGTGA** 

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

**Restriction Sites:** Sgfl-Mlul

**ACCN:** NM\_001204961

**Insert Size:** 1044 bp



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## PBX1 (NM\_001204961) Human Untagged Clone - SC331632

**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 001204961.2

RefSeq Size: 6974 bp
RefSeq ORF: 1044 bp
Locus ID: 5087
Cytogenetics: 1q23.3

**Protein Families:** Druggable Genome, Stem cell - Pluripotency, Transcription Factors

**MW:** 38.4 kDa

**Gene Summary:** This gene encodes a nuclear protein that belongs to the PBX homeobox family of

transcriptional factors. Studies in mice suggest that this gene may be involved in the regulation of osteogenesis and required for skeletal patterning and programming. A

chromosomal translocation, t(1;19) involving this gene and TCF3/E2A gene, is associated with pre-B-cell acute lymphoblastic leukemia. The resulting fusion protein, in which the DNA binding domain of E2A is replaced by the DNA binding domain of this protein, transforms cells by constitutively activating transcription of genes regulated by the PBX protein family. Alternatively spliced transcript variants encoding different isoforms have been found for this

gene. [provided by RefSeq, Jun 2017]

Transcript Variant: This variant (2) is missing an internal coding exon compared to variant 1. This results in a frame-shift and a shorter isoform (2, also known as isoform PBX1b) with a distinct C-terminus compared to isoform 1. Variants 2 and 5 encode the same isoform.