

Product datasheet for SC118523

PBX1 (NM_002585) Human Untagged Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | PBX1 (NM_002585) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | PBX1 |
| Synonyms: | CAKUHD |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL4</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| Fully Sequenced ORF: | >OriGene ORF within SC118523 sequence for NM_002585 edited (data generated by NextGen Sequencing) |

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ATGGACGAGCAGCCAGGCTGATGCATTCCCATGCTGGGGTCGGGATGGCCGGACACCC
GGCCTGTCCCAGCACTTGCAGGATGGGGCCGAGGGACCGAGGGGAGGGCGGGAGGAAG
CAGGACATTGGAGACATTTTACAGCAAATTATGACCATCACAGACCAGAGTTTGGATGAG
GCGCAGGCCAGAAAACATGCTTTAAACTGCCACAGAATGAAGCCTGCCTTGTTAATGTG
TTGTGTGAAATCAAAGAAAAACAGTTTTGAGTATCCGAGGAGCCAGGAGGAGAAACC
ACAGACCCCGAGCTGATGCGGCTGGACAACATGCTGTTAGCGGAAGGCGTGGCGGGCCT
GAGAAGGGCGGAGGGTCGGCGGCAGCGGCGCAGCGGCGCGGCTTCTGGAGGGGAGGT
TCAGACAACCTAGTGGAGCATTAGATTACAGAGCCAACTCTCACAGATCAGACAAATC
TACCATACGGAGCTGGAGAAATACGAGCAGGCCTGCAACGAGTTCACCACCCACGTGATG
AATCTCCTGCGAGAGCAAAGCCGACCAGGCCATCTCCCAAAGGAGATTGAGCGGATG
GTCAGCATCATCCACCGCAAGTTCAGCTCCATCCAGATGCAGCTCAAGCAGAGCAGTGC
GAGGCGGTGATGATCCTGCGTTCCCGATTTCTGGATGCGCGGCGGAAGAGACGGAATTC
AACAAAGCAAGCGACAGAAATCCTGAATGAATATTTCTATTTCCATCTCAGCAACCCTTAC
CCCAGTGAGGAAGCCAAAGAGGAGTTAGCCAAGAAGTGTGGCATCACAGTCTCCAGGTA
TCAAACCTGGTTTGGAAATAAGCGAATCCGGTACAAGAAGAACATAGGTAATTTCAAGAG
GAAGCCAATATTTATGCTGCCAAAACAGCTGTCACTGCTACCAATGTGTCAGCCCATGGA
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TCAAACCTGGAGATTTGTTTCATGAGCGTGCAGTCACTCAATGGGGATTCTTACCAAGGG
GCCAGGTTGGAGCCAACGTGCAATCACAGGTGGATACCCTTCGCCATGTTATCAGCCAG
ACAGGAGGATACAGTGTGACTCGCAGCCAGTCAAGTGTACAGTCCGCAGGGCATCAGT
GCTAATGGAGGTTGGCAGGATGCTACTACCCCTTCATCAGTGACCTCCCTACAGAAGGC
CCTGGCAGTGTTCACTCTGATACCTCCAACCTGA

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Clone variation with respect to NM_002585.3



[View online »](#)

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_002585 unedited
 GGGTGCAAATTTTGTATACGACTCACTATAGGCGGCCGCGAAATTCGCACGAGGCTTGAA
 GGATAAAAAGCCTTGGTGCTTCCAGGAGCCGAGCCGAGGAGCAGAAGAGGAAGAGCCGG
 GGGCTGCCGTAGCCTTTGGAGATGGACGAGCAGCCAGGCTGATGCATTCCCATGCTGGG
 GTCGGGATGGCCGGACACCCCGGCTGTCCAGCACTTGCCAGGATGGGGCCGGAGGGACC
 GAGGGGGAGGGCCGGGAGGAAGCAGGACATTGGAGACATTTTACAGCAAATATGACCATC
 ACAGACCAGAGTTTGGATGAGGCGCAGGCCAGAAAACATGCTTTAACTGCCACAGAATG
 AAGCCTGCCTTGTAAATGTGTTGTGAAATCAAAGAAAAAACAGTTTTGAGTATCCGA
 GGAGCCCAGGAGGAGGAACCCACAGACCCCGCTGATGCGGCTGGACAACATGCTGTTA
 GCGGAAGGCGTGGCGGGGCTGAGAAGGGCGGAGGGTCCGCGGCAGCGCGGCAGCGGG
 GCGGCTTCTGGAGGGCAGGTTCCAGACAACTCAGTGGAGCATTACAGTACAGAGCCAAA
 CTCTCACAGATCAGACAAATCTACCATACGAGCTGGAGAAATACGAGCAGGCCTGCAAC
 GAGTTCACCACCCACGTGATGAATCTCCTGCGAGAGCAAGCCNGACCAGGCCATCTCCC
 CAAAGGAGATTGAGCGGATGGTCAGCATCATCCACCGCAAGTTCAGCTCCATCCAGATGC
 AGCTCAAGCAGAGCACGTGCGAAGCGGTGATGATCCTGCNGTCCCGATTTCTGGATGCGN
 CGCNGNAGAGACGNATTTCAACAGCAGCGACAGAAATCTGAATGAATATTNTATTCCC
 ATCTCAGCACCTTACCCAGG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_002585 unedited
 NNNGGGATATATCTATGNNACCGCGCCGCATNCTAGNGATCGATTTTTTTTTTTTTTTTT
 TTTTAGTTTACAAAATGAATTACTGTCACTTTTAAACATTGTGAAACAAGAAATGGATGT
 GCACAACCTCGACTTTTCTAGCATTCTTGAACATAATTCACAAATGCAAGAAAATAAAAG
 AAAAATGAGGGAAATGATGAATGTAGGTAGTCTGGTGTTAAAACTAATGCAGGAATGAT
 GCGCATTGTCACAGAAAGAAGAGGGGAAATTTCCCATCCTGTTTTGCGTGCATGAGGGT
 CATTTTTAAAATTTTTATTATAAACACTATTAATTCAGACCCGCTTTTTTGGTTTTTTTT
 TTCTTTATCTGAATATACAAGAACATTCATTATCAAATGTTTCATCATCAATACTACAAG
 AACGAGACACAAGTCGCAAGAAACAATGGAAAATGTTAATAAAGCTGAAAGAATCGTTGA
 GTTTTTTTTTGTTCTTTTAAAGTTTTTTTTTAAATTTGAGTTTCTGTAGTTTCATCTTTT
 TTGGTATCGAAGTCAGTTTTTCTGGGCAGAAAAACAAGAGCAGGAAAGAGAGAGACAG
 AGAGAAAGATGTGTGAGAAAAGACAACCCAGCAAATAAAGAATCACCACCATAGCAAAATA
 AAACATAAATTGAAAGAAGGTGCCACTTGGCAAATGTAAGTGCACGGGCGTCAATTCATG
 CCAGAGGGAGGATGAATTAGGGATGAAAAGGAGGAGATAAGGAAGAGTTACAAGGTGGGG
 CAAACCCANGGTCTAGTATCGTTTCTCAGGGGAAAATCGCTGTCGGGGAAAATGGAGCAC
 TCCACCTCTATTAGAAAATGAGAAAATCCTGGGTGCATCTTGCTCTCTGGA

Restriction Sites:

NotI-NotI

ACCN:

NM_002585

Insert Size:

4700 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_002585.1](#), [NP_002576.1](#)

RefSeq Size: 1819 bp

RefSeq ORF: 1293 bp

Locus ID: 5087

UniProt ID: [P40424](#)

Cytogenetics: 1q23.3

Domains: homeobox, PBX

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

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 (1) represents the predominant transcript and encodes the longest isoform (1, also known as isoform PBX1a).