

# **Product datasheet for MC217277**

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## Runx2 (NM\_001145920) Mouse Untagged Clone

### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Runx2 (NM\_001145920) Mouse Untagged Clone

Tag: Tag Free Symbol: Runx2

Synonyms: AM; AML3; Cbf; Cbfa; Cbfa-1; Cbfa1; LS3; Os; Osf2; PEB; Pebp2a1; PEBP2aA; Pebpa2a

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)



Fully Sequenced ORF: >NM\_001145920.1

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGCGTATTCCTGTAGATCCGAGCACCAGCCGGCGCTTCAGCCCCCCCTCCAGCAGCCTGCAGCCCGGCA AGATGAGCGACGTGAGCCCGGTGGTGGCTGCGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAACAGCA GCGGCAGCGGCGGCGGCAGCAGCGGCGGCGGCGCCAGTGCCCCGATTGAGGCCGCCGCACGACAACCGCA CCATGGTGGAGATCATCGCGGACCACCCGGCCGAACTGGTCCGCACCGACAGTCCCAACTTCCTGTGCTC CGTGCTGCCCTCGCACTGGCGGTGCAACAAGACCCTGCCCGTGGCCTTCAAGGTTGTAGCCCTCGGAGAG GTACCAGATGGGACTGTGGTTACCGTCATGGCCGGGAATGATGAGAACTACTCCGCCGAGCTCCGAAATG CCTCCGCTGTTATGAAAAACCAAGTAGCCAGGTTCAACGATCTGAGATTTGTGGGCCGGAGCGGACGAGG CAAGAGTTTCACCTTGACCATAACAGTCTTCACAAATCCTCCCCAAGTGGCCACTTACCACAGAGCTATT AAAGTGACAGTGGACGGTCCCCGGGAACCAAGAAGGCACAGAAGCTTGATGACTCTAAACCTAGTT TGTTCTCTGATCGCCTCAGTGATTTAGGGCGCATTCCTCATCCCAGTATGAGAGTAGGTGTCCCGCCTCA GAACCCACGGCCCTCCCTGAACTCTGCACCAAGTCCTTTTAATCCACAAGGACAGAGTCAGATTACAGAT CCCAGGCAGGCACAGTCTTCCCCACCGTGGTCCTATGACCAGTCTTACCCCTCCTATCTGAGCCAGATGA CATCCCCATCCATCCACTCCACCACGCCGCTGTCTTCCACACGGGGCACCGGGCTACCTGCCATCACTGA CGTGCCCAGGCGTATTTCAGATGACACTGCCACCTCTGACTTCTGCCTCTGGCCTTCCTCTCAGT AAGAAGACCCAGGCAGGTGCTTCAGAACTGGGCCCTTTTTCAGACCCCAGGCAGTTCCCAAGCATTTCAT CCCTCACTGAGAGCCGCTTCTCCAACCCACGAATGCACTACCCAGCCACCTTTACCTACACCCCGCCAGT GGCTCTTCCCAAAGCCAGAGTGGACCCTTCCAGACCAGCAGCACTCCATATCTCTACTATGGTACTTCGT CAGCATCCTATCAGTTCCCAATGGTACCCGGGGGAGACCGGTCTCCTTCCAGGATGGTCCCACCATGCAC CACCACCTCGAATGGCAGCACGCTATTAAATCCAAATTTGCCTAACCAGAATGATGGTGTTGACGCTGAC GGAAGCCACAGCAGTTCCCCAACTGTTTTGAATTCTAGCGGCAGAATGGATGAGTCTGTTTGGCGGCCAT **ATTGA** 

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCTGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA

Chromatograms: <a href="https://cdn.origene.com/chromatograms/ja1464">https://cdn.origene.com/chromatograms/ja1464</a> e03.zip

**Restriction Sites:** Sgfl-Mlul

**ACCN:** NM\_001145920

**Insert Size:** 1545 bp



#### **OTI Disclaimer:**

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:customercom">customercom</a> or by calling 301.340.3188 option 3 for pricing and delivery.

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. <u>More info</u>

### 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 001145920.1, NP 001139392.1</u>

RefSeq Size: 6463 bp RefSeq ORF: 1545 bp Locus ID: 12393

Cytogenetics: 17 21.33 cM

**Gene Summary:** 

This gene encodes a member of the runt domain-containing family of transcription factors. This protein is essential for osteoblastic differentiation and skeletal morphogenesis and acts as a scaffold for nucleic acids and regulatory factors involved in skeletal gene expression. The protein can bind DNA both as a monomer or, with more affinity, as a subunit of a heterodimeric complex. Transcript variants that encode different protein isoforms result from the use of alternate promoters as well as alternate splicing. [provided by RefSeq, Sep 2015]

Transcript Variant: This variant (2) represents use of a proximal promoter. It lacks two alternate exons including the 5' UTR and a portion of the 5' coding region, and initiates translation in an alternate 5' segment, compared to variant 1. The encoded isoform (2, also known as MRIPV) has a distinct N-terminus and is shorter than isoform 1. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.