

Product datasheet for **SC318014**

RUNX2 (NM_001024630) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RUNX2 (NM_001024630) Human Untagged Clone
Tag:	Tag Free
Symbol:	RUNX2
Synonyms:	AML3; CBF-alpha-1; CBFA1; CCD; CCD1; CLCD; OSF-2; OSF2; PEA2aA; PEBP2aA
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF: >OriGene sequence for NM_001024630 edited
 GCGATCGCCATGCTTCATTTCGCCTCACAAACAACCACAGAACCACAAGTGCGGTGCAAAC
 TTTCTCCAGGAGGACAGCAAGAAGTCTCTGGTTTTTAAATGGTTAATCTCCGCAGGTCAC
 TACCAGCCACCGAGACCAACAGAGTCATTTAAGGCTGCAAGCAGTATTTACAACAGAGGG
 TACAAGTTCTATCTGAAAAAAAAAGGAGGGACTATGGCATCAAACAGCCTCTTCAGCACA
 GTGACACCATGTACAGAAAACCTCTTTTGGGATCCGAGCACCAGCCGGCGCTTCAGCCCC
 CCCTCCAGCAGCTGCAGCCCGCAAAATGAGCGACGTGAGCCCGGTGGTGGCTGCGCAA
 CAGCAGCAGCAACAGCAGCAGCAGCAACAGCAGCAGCAGCAGCAGCAACAGCAGCAGCAG
 CAGCAGGAGGCGCGCGCGGGCTGCGCGCGCGCGGGCTGCGCGCGCGCGGCTGCGCGCGCGCAGCTGCA
 GTGCCCGGTTGCGGCCGCCACGACAACCGACCATGGTGGAGATCATCGCCGACCAC
 CCGGCCGAACTCGTCCGACCGACAGCCCAACTTCTGTGCTCGGTGCTGCCCTCGCAC
 TGGCGTGCACAAGACCCTGCCGTGGCCTTCAAGGTGGTAGCCCTCGGAGAGGTACCA
 GATGGGACTGTGGTTACTGTCATGGCGGTAACGATGAAAATTATCTGCTGAGCTCCGG
 AATGCCTCTGCTGTTATGAAAAACCAAGTAGCAAGTTCAACGATCTGAGATTTGTGGG
 CGGAGTGGACGAGCAAGAGTTTACCTTGACCATAACCGTCTTCAAAATCCTCCCAA
 GTAGCTACCTATCACAGAGCAATTAAAGTTACAGTAGATGGACCTCGGGAACCCAGAAGG
 CACAGACAGAAGCTTGATGACTCTAAACCTAGTTTGTCTCTGACCGCCTCAGTGATTTA
 GGGCGCATTCTCATCCCAGTATGAGAGTAGGTGTCCCGCCTCAGAACCCACGGCCCTCC
 CTGAACTCTGCACCAAGTCCTTTAATCCACAAGGACAGAGTCAGATTACAGACCCACAGG
 CAGGCACAGTCTTCCCGCCGTGGTCTATGACCAGTCTTACCCCTCCTACCTGAGCCAG
 ATGACGTCCCGTCCATCCACTTACCACCCCGTGTCTTCCACACGGGGCACTGGGCTT
 CCTGCCATCACCAGTGTGCCTAGGCGCATTTTCAGATGATGACTGCCACCTCTGACTTC
 TGCTCTGGCCTTCCACTCTCAGTAAGAAGAGCCAGGCAGGTGCTTCAGAACTGGGCCCT
 TTTTCAGACCCACAGGCAAGTTCCCAAGCATTTTCATCCCTCACTGAGAGCCGCTTCTCCAAC
 CCACGAATGCACTATCCAGCCACCTTTACTTACACCCCGCCAGTCACCTCAGGCATGTCC
 CTCGGTATGTCCGCCACCACTACTACCACACCTACCTGCCACCACCCTACCCCGGCTCT
 TCCCAAAGCCAGAGTGGACCTTCCAGACCAGCAGCACTCCATATCTCTACTATGGCACT
 TCGTCAGGATCCTATCAGTTTCCATGGTGCCGGGGGAGACCGGTCTCCTTCCAGAAATG
 CTTCCGCCATGCACCACCACCTCGAATGGCAGCAGCTATTAATCCAAATTTGCCTAAC
 CAGAATGATGGTGTGACGCTGATGGAAGCCACAGCAGTCCCAACTGTTTTGAATTCT
 AGTGGCAGAATGGATGAATCTGTTTGGCGACCATATTGATCTAGA

Restriction Sites: Please inquire

ACCN: NM_001024630

Insert Size: 1800 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 custsupport@origene.com 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. [More info](#)

OTI Annotation:	The open reading frame of this clone has been fully sequenced and found to be a perfect match to the protein associated with this reference, NM_001024630.2.
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:	<u>NM_001024630.2</u> , <u>NP_001019801.2</u>
RefSeq Size:	5572 bp
RefSeq ORF:	1770 bp
Locus ID:	860
UniProt ID:	<u>Q13950</u>
Cytogenetics:	6p21.1
Protein Families:	Druggable Genome, Transcription Factors
Gene Summary:	<p>This gene is a member of the RUNX family of transcription factors and encodes a nuclear protein with an Runt DNA-binding domain. 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. Two regions of potential trinucleotide repeat expansions are present in the N-terminal region of the encoded protein, and these and other mutations in this gene have been associated with the bone development disorder cleidocranial dysplasia (CCD). Transcript variants that encode different protein isoforms result from the use of alternate promoters as well as alternate splicing. [provided by RefSeq, Jul 2016]</p> <p>Transcript Variant: This variant (1) encodes the longest isoform (a, also known as OSF2/CBFA1a). 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. There are no full-length transcripts supporting this RefSeq in human; however, it is represented based on PMID: 9434946, and full-length transcript support from the mouse homolog (GeneID: 12393, AF010284.1).</p>