

## Product datasheet for **SC310223**

### **RUNX1T1 (NM\_175634) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	RUNX1T1 (NM_175634) Human Untagged Clone
Tag:	Tag Free
Symbol:	RUNX1T1
Synonyms:	AML1-MTG8; AML1T1; CBFA2T1; CDR; ETO; MTG8; ZMYND2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**Fully Sequenced ORF:** >SC310223 representing NM\_175634.  
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGATATCTGTCAAAGAACAACACTTGGAGAGCACTGAGTTTGTAAATAGGTGACTGCCGGAAAAAGGG
AACTTTGAATATTGTCAAGATCGTACTGAGAAGCACTCCACAATGCCAGACTCACCTGTGGATGTGAAG
ACGCAATCTAGGCTGACTCCTCCAACAATGCCACCTCCCCAACTACTCAAGGAGCTCCAAGAACCAGT
TCATTTACACCGACAACGTAACTAATGGCAGCAGCCATTCTCCTACAGCCTTGAATGGCGCCCCCTCA
CCACCAATGGCTTCAGCAATGGGCCTTCTCTTCTCCTCCTCTCTGGCTAATCAACAGCTGCC
CCAGCCTGTGGTGCCAGGCAACTCAGCAAGCTGAAAAGTTTCTTACTACCCTGCAGCAGTTTGGCAAT
GACATTTACCCGAGATAGGAGAAAAGAGTTCGCACCTCGTTCTGGGACTAGTGAACCTCACTTTGACA
ATTGAAGAATTTCACTCAAACGCAAGAAGCTACTAACTCCCCTGAGACCTTTTGTATCCCATTTT
TTGAAGGCCAACTTGCCCTGCTGCAGCGTGAGCTCCTCCACTGCGCAAGACTGGCCAAACAGAACCCT
GCCAGTACCTCGCCAGCATGAACAGCTGCTTCTGGATGCCAGCACCTCACCTGTTGACTCCTCA
GAGCTGCTTCTCGATGTGAACGAAAACGGGAAGAGGCGAACTCCAGACAGAACCAAGAAAATGGCTTT
GACAGAGAGCCTTTGCACTCAGAACATCCAAGCAAGCGACCATGCACTATTAGCCAGGCCAGCGGTAC
AGTCAAATAACGGCTTATCCTACCAGCCCAATGGCCTGCCTCACCTACCCACCTCCACCTCAGCAT
TACCGTTTGGATGATATGGCCATTGCCACCACTACAGGGACTCCTATCGACACCCAGCCACAGGGAC
CTCAGGGACAGAAACAGACCTATGGGGTTGCATGGCACACGTCAAGAAGAAAATGATTGATCACAGACTA
ACAGACAGAGAAATGGGCAGAAGAGTGGAAAACATCTTGACCATCTGTTAACTGCATAATGGACATGGTA
GAAAAACAAGGCGATCTCTCACCGTACTAAGGCGGTGTCAGAAGCAGACCGGGAAGAAATTGAATTAC
TGGATCCGGCGGTACAGTGACGCCGAGGACTTAAAAAAGTTGGCGCAGTAGCAGCAGCCACTTAGG
CAGCAGAGTCCCGTCAACCCAGACCCAGTTGCACTAGACGCGCATCGGGAATTCCTTACAGGCCTGCG
TCTGGATACGTGCCAGAGGAGATCTGGAAGAAAGCTGAGGAGGCCGTCAATGAGGTGAAGCGCCAGGCG
ATGACGGAGTGCAGAAGGCCGTGTCTGAGGCGGAGCGGAAAGCCACGACATGATCACAACAGAGAGG
GCCAAGATGGAGCGCACGGTCGCCGAGGCCAAACGGCAGGCGGCGGAGGACGCACTGGCAGTTATCAAT
CAGCAGGAGGATTCAAGCGAGAGTTGCTGGAATTGTGGCCGTAAGCGAGTGAACCTGCAGTGGCTGT
AACACAGCCCATACTGTGGCTCATTTTCCAGCACAAAGACTGGGAGAAGCACCATCACATCTGTGGA
CAGACCTGCAGGCCAGCAGGAGACACCTGCAGTCAGCTCCTCTGTACGCCAACAGCGGG
GCTGGGAGCCGATGGACACACCACAGCAGCCACTCCGAGGTCAACCACCCCGGAACCCCTTCCACC
ATAGAGACAACCCCTCGCTAG
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTAAACGGCCGGC
  
```

**Restriction Sites:** SgfI-MluI

**Plasmid Map:** □

**ACCN:** NM\_175634

**Insert Size:** 1815 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).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_175634.2</a>
<b>RefSeq Size:</b>	7545 bp
<b>RefSeq ORF:</b>	1815 bp
<b>Locus ID:</b>	862
<b>UniProt ID:</b>	<a href="#">Q06455</a>
<b>Cytogenetics:</b>	8q21.3
<b>Protein Families:</b>	Transcription Factors
<b>Protein Pathways:</b>	Acute myeloid leukemia, Pathways in cancer
<b>MW:</b>	67.6 kDa
<b>Gene Summary:</b>	<p>This gene encodes a member of the myeloid translocation gene family which interact with DNA-bound transcription factors and recruit a range of corepressors to facilitate transcriptional repression. The t(8;21)(q22;q22) translocation is one of the most frequent karyotypic abnormalities in acute myeloid leukemia. The translocation produces a chimeric gene made up of the 5'-region of the runt-related transcription factor 1 gene fused to the 3'-region of this gene. The chimeric protein is thought to associate with the nuclear corepressor/histone deacetylase complex to block hematopoietic differentiation. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2010]</p> <p>Transcript Variant: This variant (2) utilizes two alternate exons in the 5' UTR and coding region compared to variant 1. The resulting protein (isoform B, also known as MTG8b) has a distinct N-terminus compared to isoform A. Variants 2 and 7-12 all encode isoform B. Sequence Note: The RefSeq transcript was derived from the reference genome assembly. The genomic coordinates were determined from alignments.</p>