

## Product datasheet for **RC234539**

### **RUNX1T1 (NM\_001198627) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	RUNX1T1 (NM_001198627) Human Tagged ORF Clone
Tag:	Myc-DDK
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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**ORF Nucleotide Sequence:**

>RC234539 ORF sequence  
**Red**=Cloning site **Blue**=ORF **Green**=Tags(s)

```
TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

RCATGATATCTGTCAAAAGAAACACTTGGAGAGCACTGAGTTAGTAATAGGTGACTGCCGAAAAAAGG
GAACCTTTGAATATTGTCAAGATCGTACTGAGAAGCACTCCACAATGCCAGACTCACCTGTGGATGTGAAG
ACGCAATCTAGGCTGACTCCTCCAACAATGCCACCTCCCCCAACTACTCAAGGAGCTCCAAGAACCAGTT
CATTTACACCGACAACGTTAACTAATGGCAGGACCATTCTCTACAGCCTTGAATGGCGCCCCCTCAC
ACCCAATGGCTTCAAGCAATGGGCCTTCTTCTTCTCTCTCTGCTAATCAACAGCTGCCCCCA
GCCTGTGGTGCCAGGCAACTCAGCAAGCTGAAAAGTTCCTTACTACCCTGCAGCAGTTTGGCAATGACA
TTTCCCCGAGATAGGAGAAAGAGTTCGCACCCTCGTTCGGGACTAGTGAATCCACTTGGCAATTGA
AGAATTTCACTTCAAACGCAAGAAGCTACTAACTTCCCCTGAGACCTTTTGTATCCCATTTTGAAG
GCCAATTGCCCTGCTGCAGCGTGGCTCCCTCCACTGCGCAAGACTGGCCAAACAGAACCCTGCCAGT
ACCTCGCCAGCATGAACAGCTGCTTCTGGATGCCAGCACCCCTCACCTGTTGACTCCTCAGAGCTGCT
TCTCGATGTGAACGAAAACGGGAAGAGGCGAATCCAGACAGAACCAAAGAAAATGGCTTTGACAGAGAG
CCTTTGCACTCAGAACATCCAAGCAAGCGACCATGCACTATTAGCCCAGGCCAGCGGTACAGTCAAATA
ACGGCTTATCCTACCAGCCCAATGGCCTGCCTCACCCCTACCCACCTCCACTCAGCATTACCGTTTGA
TGATATGGCCATTGCCACCACTACAGGGACTCCTATCGACACCCAGCCACAGGGACCTCAGGGACAGA
AACAGACCTATGGGGTTGATGGCACACGTCAAGAAGAAATGATTGATCAGACTAACAGACAGAGAAT
GGGCAGAAAGAGTGGAAACATCTTGACCATCTGTTAACTGCATAATGGACATGGTAGAAAAAACAGGCG
ATCTCTCACCGTACTAAGGCGGTGTAAGAAGCAGACCGGGAAGAAATTGAATTACTGGATCCGGCGGTAC
AGTGACGCCGAGGACTTAAAAAAAGGTGGCGGAGTGCAGCAGCAGCACTTAGGCAGCAGAGTCCCGTCA
ACCCAGACCCAGTTGCACTAGACGCGCATCGGGAATCCTTACAGGCCTGCGTCTGGATACGTGCCAGA
GGAGATCTGGAAGAAAGCTGAGGAGGCCGTCAATGAGGTGAAGCGCCAGGCGATGACGGAGCTGCAGAAG
GCCGTGCTGAGGCGGAGCGGAAAGCCCACGACATGATCACAACAGAGAGGGCAAGATGGAGCGCACGG
TCGCCGAGGCCAAACGGCAGGCGGCGGAGGACGCACTGGCAGTTATCAATCAGCAGGAGGATTCAAGCGA
GAGTTGCTGGAATTGTGGCCGTAAGCGGAGTAAACCTGCAGTGGCTGTAAACACAGCCCATACTGTGGC
TCATTTTCCAGCACAAAGACTGGGAGAAGCACCATCACATCTGTGGACAGACCTGCAGGCCACAGCAGC
AGGAGACACACCTGCAGTCACTCTGTCAGCCCAACAGCGGGGCTGGGAGCCGATGGACACACC
ACCAGCAGCAGTCCGAGGTCAACCACCCGGAACCCCTTCACCATAGAGACAACCCCTCGC

ACGCGTACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA
```

**Protein Sequence:**

>RC234539 protein sequence  
**Red**=Cloning site **Green**=Tags(s)

```
X*YLSKETLGEH*V***VTAGKKGLNIVKIVLRSTPQCQTHLWM*RRNLG*LLQQCHLPQLLKELQEPV
HLHRQR*LMARAILLQP*MAPPHPMASAMGLPLLPPLWLINSCPQVVPVGNAS*KGSLLPCSSLAMT
FHPR*EKEFAPSFWD**TPL*QLKNFIPNCKLLTSH*DLLSSH*F*RPTCPCCSVSSSTAQDWPNRTLPS
TSPSMNSCFWMPAPPHTLPQSCFSM*TKTGRGELQTEPKKMALTESLCTQNIQASDHALLAQASGTVQI
TAYPTSPMACTLPHLHLSITVWMIWPLPTTGTPIIDTPATGTSGETDLWGCMAHVKKK*LITD*QTEN
GQKSGNILITIC*TA*WTW*KKQGDLSFY*GGVKKQTGKN*ITGSGGTVTPRT*KKVAVAATAATLGSRVPS
TQTQLH*TRIGNSFTGLRLDTCQRRSGRKLRRPSMR*SARR*RSCRRPCLRRSGKPTT*SQQRGPRWSAR
SRPNRRRRRTHWQLSISRRIQARVAGIVAVKRVKPAVAVTQPDTVAHFASKTGRSTITSVDRPCRPS
RETHLQSAPLSRPTAGL GARWTHHQQLRGQPPREPLPP*RQPL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV
```

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001198627

**ORF Size:** 1812 bp

**OTI Disclaimer:** 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:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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\\_001198627.1](#), [NP\\_001185556.1](#)

**RefSeq Size:** 7687 bp

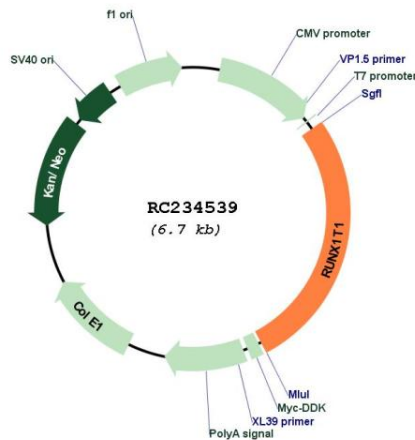
**RefSeq ORF:** 1815 bp

**Locus ID:** 862

**UniProt ID:** [Q06455](#)

<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>	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]

**Product images:**



Circular map for RC234539