

Product datasheet for **RG231362**

RUNX1T1 (NM_001198679) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RUNX1T1 (NM_001198679) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RUNX1T1
Synonyms:	AML1-MTG8; AML1T1; CBFA2T1; CDR; ETO; MTG8; ZMYND2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>RG231362 representing NM_001198679
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTGCCATCCTGACAAGGCTTTTACTTCTGATAAGCTCCAATGTGTGTTAATGAATACAAAGCCGCGG
TCTGGGTGCCGCTCGGCCGCGGCCGCTCTCCCGCTCCTTTGCCAGAAGCTGGCGGAGAGAATTTACA
TTTAAAGATTAGCAGAGTGAGAAAGAGAAATCTGCCTTTTGTGTGGGTGAGGAGGAGCATCTACC
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TCCCCAACTACTCAAGGAGCTCCAAGAACCAGTTCATTTACACCGACAACGTTAACTAATGGCAGCAGC
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CCTACCCACCTCCACCTCAGCATTACCGTTTGGATGATATGGCCATTGCCACCACTACAGGGACTCCT
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CCTGCAGTGGCTGTAACACAGCCCGATACTGTGGCTCATTTTGCCAGCACAAAGACTGGGAGAAGCACCA
TCACATCTGTGGACAGACCTGCAGGCCAGCAGCAGGGAGACACACCTGCAGTCAGCTCCTCTGTACAG
CCCAACAGCGGGGCTGGGAGCCCGATGGACACACCACCAGCAGCCACTCCGAGGTCAACCACCCGGGAA
CCCCTTCCACCATAGAGACAACCCCTCGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

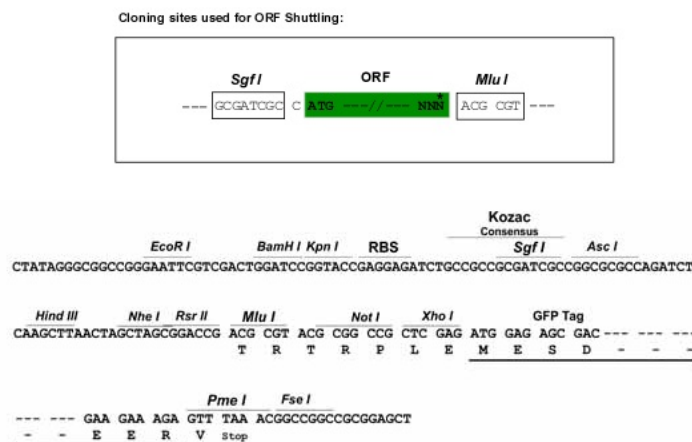
Protein Sequence: >RG231362 representing NM_001198679
Red=Cloning site Green=Tags(s)

MCHPDKAFTSDKLQCVFNEYKAAVWVPPRPRPLSRAPLPEAGGENLHLKISRVRKRNLPFVWVGEEEST
 PGLDAISHHLCPDRTHRDRTEKHSTMPDSDPVDVKTQSRLTPPTMPPPTTQGAPRTSSFPTTLTNGTS
 HSPTALNGAPSPNGFSNGPSSSSSSSLANQQLPPACGARQLSKLKRFLTTLQQFGNDISPEIGERVTL
 VLGLVNSTLTIEEFHSLKQEATNFPLRPFVIPFLKANLPLLQRELLHCARLAKQNPAAQYLAQHEQLLLDA
 STTSPVDSSELLLDVNEGKRRTPDRTKENGFDREPLHSEHPSKRPCTISPGQRYSPNGLSYQPNGLPH
 PTPPPPQHYRLDDMAIAHHRDYSYRHPSHRDLRDRNRPMGLHGTRQEEMIDHRLTDREWAEWKLHDHLL
 NCIMDMVEKTRRSLTVLRRCQEADREELNYWIRRYSDAEDLKKGGGSSSSHSRQQSPVNDPVALDAHRE
 FLHRPASGYVPEEIWKKAEEAVNEVKRQAMTELQKAVSEAEKKAHDMITTERAKMERTVAEAKRQAEDA
 LAVINQQEDSSSEWCNCRKASETCGSCNTARYCGSFCQHKDWEKHHHICGQTLQAQQQGDTPAVSSSVT
 PNSGAGSPMDTPPAATPRSTTPGTPSTIETTPR

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001198679

ORF Size: 1989 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_001198679.1](#), [NP_001185608.1](#)

RefSeq Size: 7454 bp

RefSeq ORF: 1992 bp

Locus ID: 862

UniProt ID: [Q06455](#)

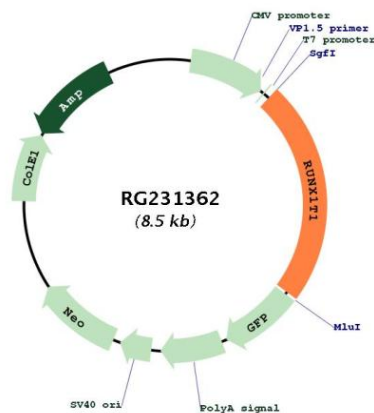
Cytogenetics: 8q21.3

Protein Families: Transcription Factors

Protein Pathways: Acute myeloid leukemia, Pathways in cancer

Gene Summary: 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 RG231362