

Product datasheet for **SC310836**

MTGR1 (CBFA2T2) (NM_001039709) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MTGR1 (CBFA2T2) (NM_001039709) Human Untagged Clone
Tag:	Tag Free
Symbol:	CBFA2T2
Synonyms:	EHT; MTGR1; p85; ZMYND3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

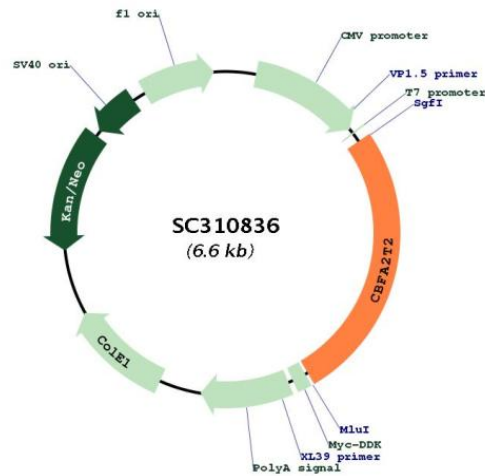


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Fully Sequenced ORF: >SC310836 representing NM_001039709.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCCTGGATCGCCTGTGGAAGTGAAGATACAGTCCAGATCCTCACCTCCCACCATGCCACCCTCCCA
CCAATAAATCCTGGAGGACCGAGGCCAGTGTCTTCACTCCTACTGCATTAAGCAATGGCATCAACCAT
TCTCCTCCTACCCTGAATGGTGGCCCATCACCGCCACAGAGATTAGCAATGGTCTGCCTCCTCCACA
TCATCTGCACTCACAATCAGCAATTGCCAGCCACTTGTGGTGTCTGACAACCTCAGCAAGTTGAAACGC
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CAATTCATCCTACCCTCCACCTCTTACGATTACACCTTAGAGGATATTGCAACTTCTCACCTGTAT
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TGA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: SgfI-MluI

Plasmid Map:


ACCN: NM_001039709

Insert Size: 1728 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.

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_001039709.1](#)

RefSeq Size: 7449 bp

RefSeq ORF: 1728 bp

Locus ID: 9139

UniProt ID: [O43439](#)

Cytogenetics: 20q11.21-q11.22

Protein Families: Transcription Factors

MW: 63.9 kDa

Gene Summary: In acute myeloid leukemia, especially in the M2 subtype, the t(8;21)(q22;q22) translocation is one of the most frequent karyotypic abnormalities. The translocation produces a chimeric gene made up of the 5'-region of the RUNX1 (AML1) gene fused to the 3'-region of the CBFA2T1 (MTG8) gene. The chimeric protein is thought to associate with the nuclear corepressor/histone deacetylase complex to block hematopoietic differentiation. The protein encoded by this gene binds to the AML1-MTG8 complex and may be important in promoting leukemogenesis. Several transcript variants are thought to exist for this gene, but the full-length natures of only three have been described. [provided by RefSeq, Jul 2008]
Transcript Variant: This variant (4) lacks an alternate exon compared to variant 2. The resulting isoform (MTGR1a) is shorter at the N-terminus compared to isoform MTGR1b.