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Product datasheet for RC223730

CBFA2T3 (NM_175931) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CBFA2T3 (NM_175931) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CBFA2T3
Synonyms:	ETO2; MTG16; MTGR2; RUNX1T3; ZMYND4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC223730 representing NM_175931
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCGGACTCCCCAGCGGAGGTGAAGACGCAGCCCCGGTCCACACCCCCCAGCATGCCGCCCCCACCGC
CTGCCGCATCCCAGGGGGCCACACGCCCCCCCTCCTTCACGCCACACACACTGATGAACGGCAGCAGCCA
CTCACCAACAGCCATCAATGGTGCACCGTGCACACCCAACGGCTTCAGCAATGGCCCGGCCACCTCGTCC
ACAGCCTCCTTGTCCACACAGCACCTGCCCCCAGCCTGCGGGGCCCGGCAGCTCAGCAAGCTCAAGCGCT
TCCTCACCACACTGCAGCAGTTTGGCAGCGACATCTCCCCAGAGATTGGGGAGCGCGTGCGCACACTGGT
GCTGGGCCTGGTGAACTCGACATTGACGATCGAGGAGTTTCATTCCAAGCTTCAGGAGGCCACCAACTTC
CCTCTGCGGCCGTTTGTCATTCCCTTCCTGAAGGCAAACCTGCCCTTGCTGCAGCGGGAGCTCCTGCACT
GTGCACGCCTGGCCAAGCAGACGCCCGCCCAGTACTTGGCCCAGCATGAGCAGCTCCTGCTGGACGCCAG
CGCCTCCTCCCCCATCGACTCCTCAGAGCTGCTACTGGAAGTCAACGAGAACGGCAAGAGGAGGACGCCC
GACAGGACCAAAGAGAACGGGTCAGACCGCGACCCGCTGCACCCCGAGCACCTCAGCAAACGGCCATGCA
CCCTGAACCCTGCCCAGCGCTACAGCCCCAGCAACGGGCCACCGCAGCCCACACCGCCGCCGCACTACCG
CCTGGAGGACATAGCCATGGCCCACCACTTCCGAGATGCCTACCGCCACCCAGACCCCCGGGAGCTACGA
GAGCGCCATCGGCCGCTTGTGGTGCCTGGGTCCCGGCAGGAAGAAGTGATCGACCACAAGCTCACAGAGC
GTGAGTGGGCAGAAGAGTGGAAGCACCTCAACAACCTCCTGAACTGCATCATGGACATGGTGGAGAAGAC
GCGGCGCTCGCTCACGGTGCTGCGCAGGTGCCAGGAGGCCGACCGCGAGGAGCTCAACCACTGGGCGCGG
CGCTACAGCGACGCCGAGGACACAAAGAAGGGCCCCGCTCCCGCCGCGGCCCGGCCCCGCAGCAGCTCCG
CCGGTCCCGAAGGGCCTCAGCTAGACGTGCCTCGCGAGTTCCTGCCGAGGACCCTCACCGGCTACGTGCC
TGAGGACATCTGGAGGAAGGCTGAAGAGGCCGTGAATGAGGTGAAGCGGCAGGCCATGTCGGAGCTGCAG
AAAGCCGTGTCGGACGCGGAGCGCAAAGCGCACGAGCTCATCACCACGGAGCGTGCCAAGATGGAGCGGG
CCCTGGCCGAGGCGAAGCGGCAGGCCTCCGAGGACGCCCTGACGGTCATCAACCAGCAGGAGGACTCCAG
CGAGAGCTGCTGGAACTGCGGGCGGAAAGCCAGTGAGACGTGCAGCGGCTGCAACGCGGCACGCTACTGC
GGGTCCTTCTGCCAGCATCGGGACTGGGAGAAGCATCACCACGTGTGTGGCCAGAGCCTGCAGGGCCCCA
CAGCCGTGGTGGCCGACCCGGTGCCTGGACCGCCCGAAGCCGCCCACAGCCTGGGCCCCTCCCTGCCTGT
GGGTGCTGCCAGCCCCAGCGAAGCCGGCTCTGCGGGGCCTTCTCGCCCCGGCTCCCCCAGCCCACCTGGC
CCACTGGACACCGTGCCCCGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC223730 representing NM_175931
Red=Cloning site Green=Tags(s)

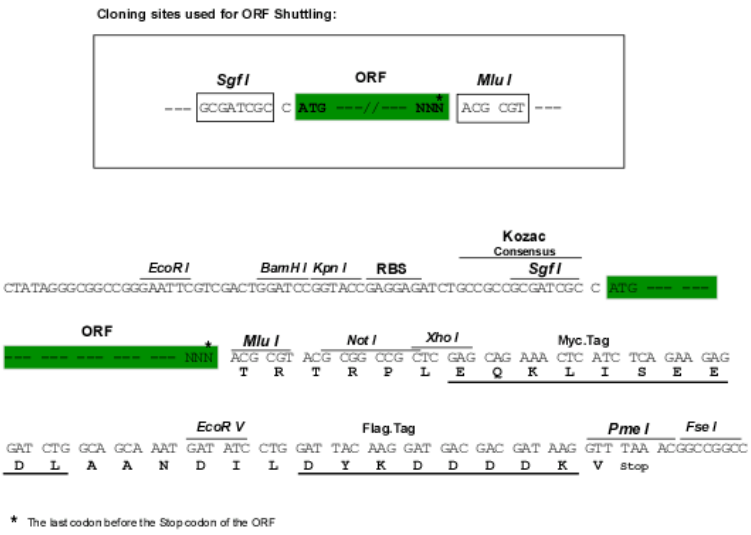
MPDSPAEVKTQPRSTPPSMPPPPPAASQGATRPPSFTPHTLMNGSSHSPTAINGAPCTPNGFSNGPATSS
TASLSTQHLPPACGARQLSKLKRFLTTLQQFGSDISPEIGERVRTLVLGLVNSTLTIEEFHSKLQEATNF
PLRPFVIPFLKANLPLLQRELLHCARLAKQTPAQYLAQHEQLLLDASASSPIDSSELLLEVNENGKRRTP
DRTKENGSDRDPLHPEHLSKRPCTLNPAQRYSPSNGPPQPTPPPHYRLEDIAMAHHFRDAYRHPDPRELR
ERHRPLVVPGSRQEEVIDHKLTEREWAEEWKHLNNLLNCIMDMVEKTRRSLTVLRRCQEADREELNHWAR
RYSDAEDTKKGPAPAAARPRSSSAGPEGPQLDVPREFLPRTLTGYVPEDIWRKAEEAVNEVKRQAMSELQ
KAVSDAERKAHELITTERAKMERALAEAKRQASEDALTVINQQEDSSESCWNCGRKASETCSGCNAARYC
GSFCQHRDWEKHHHVCGQSLQGPTAVVADPVPGPPEAAHSLGPSLPVGAASPSEAGSAGPSRPGSPSPPG
PLDTVPR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8067_f09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_175931

ORF Size: 1701 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_175931.3

RefSeq Size: 4034 bp

RefSeq ORF: 1704 bp

Locus ID: 863

UniProt ID: O75081

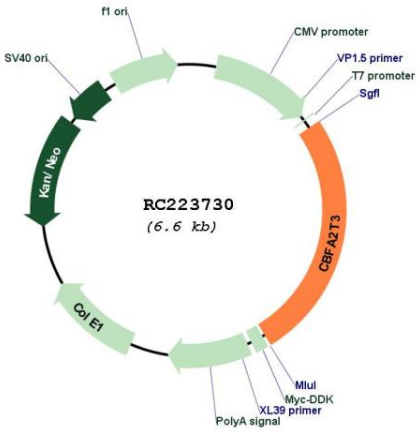
Cytogenetics: 16q24.3

Protein Families: Transcription Factors

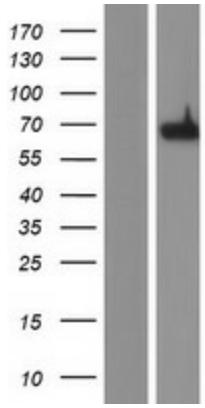
MW: 62.2 kDa

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(16;21)(q24;q22) translocation is one of the less common 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. This gene is also a putative breast tumor suppressor. Alternative splicing results in transcript variants. [provided by RefSeq, Nov 2010]

Product images:



Circular map for RC223730



Western blot validation of overexpression lysate (Cat# [LY406215]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223730 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).