

Product datasheet for **MR219692**

Cbfa2t3 (NM_009824) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cbfa2t3 (NM_009824) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cbfa2t3
Synonyms:	A630044F12Rik; AI465270; AW229127; Cbfa2t3h; ETO-2; Eto2; MTGR2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR219692 representing NM_009824
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTCCCAGGCATCCACCACCACTCTGGAGAGTGGGGCACTCCTCTCGGGACCCCGGGTCTTCAGAATG
 GAAGCCCAGCTCACAGGAAGGAGAAGGCTGCAGCAATGCCAGACTCCCCGGCTGAAGTGAAGACGCAGCC
 CCGGTCCACACCCCCAGCATGCCGCCCCACCTCCACCTCATCCAGGGAGCCACACGACCACCTCC
 TTCACACCTCACACATGGCGAGGATGGACCTGCGACGTCTTCCCATGGCCGTTTCCACGGTGTCT
 TAAAGTGGTCCATGGTCTGTCTTGTGAACGGCAGCAGCCACTCACCCAGGCCATCCACGGTCCCC
 ATCTACACCCAATGGCTTCAGCAACGGCCAGCCACCTCATCCACGGCTCGTCTCCACACAGCACCTG
 CCCCCGGCTGCGGGCACGGCAGCTCAGCAAGCTTAAGCGTTTCTCACCACCTACAGCAGTTTGGCA
 GTGACATCTCACCTGAGATCGGGGAGCGGTGCGCACACTGGTGTGGGCTGGTGAACCAACTCTGAC
 GATCGAAGAGTTTCATGCCAAGTCCAGGAAGCCACCAACTTTCCACTGAGGCCGTTTGTATCCCTTTT
 CTGAAGGTAATCTTCCACTGCTGCAGCGTGAGCTCCTGCACTGTGCCCGCTGGCCAAACAGACACCTG
 CCCAGTACCTGGCCAGCACGAACAGCTGCTGCTGGACGCCAGCGCCACCTCCCTGTGCACTCGTCTGA
 GCTCCTGCTGGAAGTCAACGAGAACGGCAAAAGGAGAACCTGCAGGACCAAAGAGAATGGATCAGAC
 CGGGACCTCTGCACCCCGACCCTCAGTAAGCGGTCTGCACCTGAGCCCCGCCAGCGCTGCAGCC
 CCAGCAATGGGCTGCCCCACCCGACGCCACCCCAACCCCGCACTATCGCTGGAGGACATGGCCATGGC
 CCACCATTTCCGGGACTCCTACCGCCATCCTGATCCCCGAGAGCTACGGGAACGCCACCGGCCCTGGCC
 ATACCTGGGTCTGACAAGAAGAAGTATTGATCACAGGCTCACAGAACGCGAGTGGGCAGAAGAATGGA
 AGCACCTCAACAGTCTTCTGAAGTGCATCATGGACATGGTGGAGAAGACCCGGCGATCCCTCACCCTCT
 GCGCCGGTGTGAGGAGCCGACCGTGAGGAAGTCAACCACTGGATCCGGTGTACAGTACTCTGAGGAG
 GGAAGAAGGGCCCTACCCCATCTCTGCCGGTCCCTCAACAGCTGCAGTGGCCCTGAGGGTCTCAGC
 TAGATGTTACCGGGACTTCACGCCAGGACCCTGTCTGGCTACATGCCTGAAGAGATCTGGAGGAAGGC
 TGAAGAAGCTGTGAATGAGGTGAAGCGCCAGGCCATGTCAGAAGTACAGAAAGCTGTGTCTGATGCGGAG
 CGCAAAGCCCATGAAGTCACTCACACAGAGCGTGCAGATGGAACGAGCCCTGGCGGAGGCCAAGCGAC
 AGGCCTCGGAGGATGCCCTGACTGTCATCAACCAGCAAGAGGACTCCAGCGAGAGCTGCTGGAAGTCCGG
 GCGCAAGGCCAGCGAGAGCTGCAGTGGTGTAAACGCCCGCTACTGCGGTCTTCTGTCAGCACAAA
 GACTGGGAGAAACACCATCACGTGTGCGCCAGAGTCTGCAGGGCCCGGGCTGCAGTGGCTGACCCAC
 TACCTGGACAGCCTGACGCCACTGCCAGCCCCAGCGAAGCCGGCTCGGCAGGGCCCTCTCGTCCCTGCT
 TCCGGGGCCGACAGCCCGCTGGACGCTGCTGTGCCCCG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR219692 representing NM_009824
 Red=Cloning site Green=Tags(s)

MSQASTTTLESGALLSGPRQLQNGSPAHRKEKAAAMPDSPAIEVKTQPRSTPPSMPPPPPTSSQGATRPPS
 FTPHTHGEDGPATSLPHGRFHGCLKWSMVCLLMNGSSHSPTAIHGAPSTPNGFSNGPATSSASLSTQHL
 PPACGARQLSKLKRFLTLQQFGSDISPEIGERVRTLVLGLVNSTLTIEEFHAKLQEATNFPLRPFVIPF
 LKANLPLLQRELLHCARLAKQTPAQYLAQHEQLLLDASATSPVDSSELLLEVNENGRRTPDRTKENGSD
 RDPLHPDHLSKRCTLSPAQRCSNGLPHPTPPPPHYRLEDMAMAHFRDSYRHPDPRELRRHRPLA
 IPGSRQEEVIDHRLTEREWAEWKHLNSLLNCLIMDMVEKTRRSLTVLRRCQEADRELNHWIRCYSDSEE
 GKKGPTPISARSLNSCSGPEGSQLDVHRDFTPRTLSGYMP EEIWRKAEAAVNEVKRQAMSELQKAVSDAE
 RKAHELITTERAKMERALAEAKRQASEDALTVINQQEDSSESCWNCGRKASETCSGCNAARYCGSFCQHK
 DWEKHHHVCGQSLQGPAAAVADPLPGQPDATASPSEAGSAGSRPCSPGPPGPLDAAVPR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9045_e02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_009824

ORF Size: 1860 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_009824.2](#), [NP_033954.2](#)

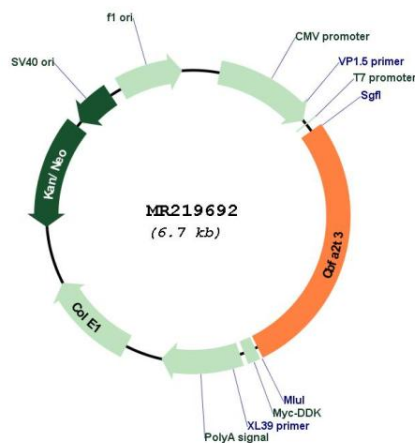
RefSeq Size: 7659 bp

RefSeq ORF: 1863 bp

Locus ID: 12398
UniProt ID: [O54972](#)
Cytogenetics: 8 E1
MW: 68.4 kDa

Gene Summary: Transcriptional corepressor which facilitates transcriptional repression via its association with DNA-binding transcription factors and recruitment of other corepressors and histone-modifying enzymes. Can repress the expression of MMP7 in a ZBTB33-dependent manner. Reduces the protein levels and stability of the transcriptional regulator HIF1A; interacts with EGLN1 and promotes the HIF1A prolyl hydroxylation-dependent ubiquitination and proteasomal degradation pathway. Contributes to inhibition of glycolysis and stimulation of mitochondrial respiration by down-regulating the expression of glycolytic genes including PFKFB3, PFKFB4, PDK1, PFKP, LDHA and HK1 which are direct targets of HIF1A (By similarity). Regulates the proliferation and the differentiation of erythroid progenitors by repressing the expression of TAL1 target genes (PubMed:16407974). Plays a role in granulocyte differentiation (PubMed:15231665).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR219692