

Product datasheet for **MR217082**

Cbfa2t2 (NM_172860) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cbfa2t2 (NM_172860) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cbfa2t2
Synonyms:	A430091M07; C330013D05Rik; Cbfa2t2h; MTGR1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR217082 representing NM_172860
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGTGGGCGTCCCTGGAGCGGCCCTTCCAACCTGGTTGTGAGAAAAGGGTGCCAGCAATGCCTGGAT
 CGCCTGTGGAAGTGAAGATACAGTCAAGATCCTCACCTCCATCATGCCACCCCTCCACCAATAAATCC
 TGGAGGACCGAGGCCAGTGTCTTTACTCTACAGCATTAAAGCAATGGCATCAACCATTCCCTCTACC
 CTGAATGGTGCCCATCGCCACCACAGAGATTCAGCAATGGCCTGCCTCTCCACATCGTCAGCACTAA
 CGAATCAACAGCTGCCGGCTACTTGTGGTCTCGGCAGCTCAGCAAGTTGAAACGCTTCTCACCCTCT
 GCAGCAGTTTGGCAATGATATCTCACCTGAGATCGGCAGAAAGTTTCGGACTCTCGTTCTAGCCTTGGT
 AACTCAACAGTAAACAATTGAAGAATCCATTGCAAGCTCCAGGAGGCCACAACTTCTCTTTCGTCAT
 TTGTGATTCATTTCTCAAGGCCAACCTGCCCTGCTGCAGCGAGAACTGCTGCACTGTGCCGGGCTGC
 CAAGCAGACCCCGTCCCAGTACCTGGCCAGCATGAGCACCTTCTGCTCAACACCAGTATCGCATCTCT
 GCTGACTCTTCTGAAGTCTCATGGAGTTTCATGGAAATGGAAAGAGGCCAGTCCGGAAAGGAGGGACG
 AGAATAATTTTGAAGAGATACAGTTCTCTCTGAACCGCCTGCCAAGAGAGTGTGTACTATCAGCCCTGC
 TCCTCGGCACAGTCCCGCCCTACTGTTCCCTTATGAATCCTGGGGGCCAGTTCATCCTACTCCACCA
 CCTCTTACAGCACTATACACTAGAAGACATTGCAACTTCTCACCTGTATCGGGAACCAAACAAGATGCTAG
 AACACCGAGAAGTTCTGTGAGAGGCCACAATCTTAGTCTCAATGGAGGCTATCAAGATGAGTTGGTAGA
 CCACCGTTTGACAGAAAGGGAGTGGGCTGATGAATGGAACACCTTGACCATGCACTGAATTGCATTATG
 GAAATGGTAGAGAAAACCTAGCGCTCCATGGCAGTTCTGAGGCGCTGTCAGGAATCTGACCGTGAAGAAC
 TCAACTATTGGAACGGCGTTTAAATGAAAATACAGAGTTGAGGAAAACCTGGGACTGAGTTGGTCTCTAG
 GCAGCACAGCCCTGGGAGTACAGATTCTCTCAGCAACGATTCTCAGCGGGAATTTACCAGTAGACCAGCA
 ACAGGATATGTGCTGTGGAGTTTTTGAAGAAAACAGAAGAAGCCGTGAATAAGGTGAAAATTCAGGCCA
 TGTGAGAGGTACAGAAGGCTGTAGCTGAGGCAGAGCAAAAAGCCTTTGAAGTGATTGCAACGGAGAGAGC
 TCGAATGGAGCAGACCATAGCGGATGTCAAACGGCAGGCTGCAGAAGATGCTTCTGTCATCAATGAG
 CAAGAAGAGTCCACAGAGAACTGCTGGAAGTGTGGCCGAAAAGCCAGTGAGACGTGCACTGGCTGCAACA
 TTGCTCGTACTGCGGCTCCTTCTGCCAGCATAAGGACTGGGAGCGGCACCACCGCTCTGTGGCCAGAG
 TCTACATGGCCACAGTCCCACAGCCAGAGCAGGCCACTGCTCCCTGGAGGGCGGGGCTCAGCCAGGTCT
 GCTGACTGCAGTGTGCCAGCCAGCCCTGGACAAGACCTCAGCTACCACCTCACGGTCTCAACACCTG
 CCTCTGTGACAGCCATTGATGCCAACGGGCTC

ACGCGTACGCGGCGGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR217082 representing NM_172860
 Red=Cloning site Green=Tags(s)

MVGVPGAAAFQLGCEKRVAMPGSPVEVKIQSRSSPPIMPPPLPPINPGGPRPVSFPTALSNGINHSPT
 LNGAPSPPPQRFSSNGPASSTSSALTNQQLPATCGARQLSKLKRFLTTLQQFGNDISPEIGEKVRTLVLALV
 NSTVTIEEFHCKLQEATNFPLRPFVIPFLKANLPLLQRELLHCARAQKTPSQYLAQHEHLLNNTSIASP
 ADSSELLMEVHGNGKRSPERRDENNFERDTPPEPPAKRVCTISPAPRHSPALTVPLMNPGGQFHPTPP
 PLQHYTLEDIATSHLYREPKNMLEHREVRERHNLNLNGGYQDELVDHRLTEREWADEWKHLDHALNCIM
 EMVEKTRRSMAVLRRQESDREELNYWKRRFNENTELRKTGTELVSRQHSPPGSDSLSNDSQREFTSRPA
 TGYVPVEFWKTEEAVNKVKIQAMSEVQKAVAEAEQKAFEVIATERARMEQTIADVQRQAEDAFLVINE
 QEESTENCWNCGRKASETCGSCNIARYCGSFCQHKDWERHRLCGQSLHGHSPHSQSRPLLPGGRGARS
 ADCSVSPALDKTSATTSRSSTPASVTAIDANGL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_172860

ORF Size: 1782 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_172860.2](#), [NP_766448.1](#)

RefSeq Size: 6100 bp

RefSeq ORF: 1785 bp

Locus ID: 12396

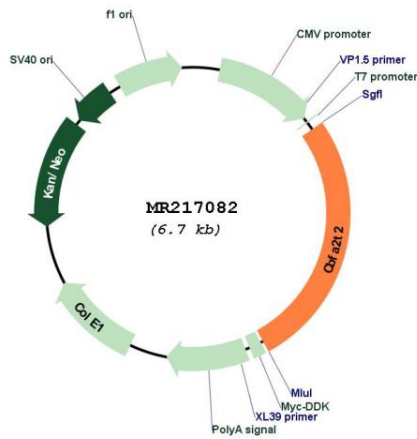
UniProt ID: [O70374](#)

Cytogenetics: 2 H1

MW: 66.4 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. Via association with PRDM14 is involved in regulation of embryonic stem cell (ESC) pluripotency. Involved in primordial germ cell (PCG) formation (PubMed:27281218). Stabilizes PRDM14 and OCT4 on chromatin in a homooligomerization-dependent manner. Can repress the expression of MMP7 in a ZBTB33-dependent manner (By similarity). Through heteromerization with CBFA2T3/MTG16 may be involved in regulation of the proliferation and the differentiation of erythroid progenitors by repressing the expression of TAL1 target genes (PubMed:19799863). Required for the maintenance of the secretory cell lineage in the small intestine (PubMed:16227606). Can inhibit Notch signaling probably by association with RBPJ and may be involved in GF11-mediated Paneth cell differentiation (PubMed:25398765). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR217082