

## Product datasheet for **MG209247**

### **Cbfa2t2 (NM\_172860) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Cbfa2t2 (NM_172860) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cbfa2t2
Synonyms:	A430091M07; C330013D05Rik; Cbfa2t2h; MTGR1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG209247 representing NM\_172860  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGTGGGCGTCCCTGGAGCGGCCCTTCCAACCTGGTTGTGAGAAAAGGGTGCCAGCAATGCCTGGATCGCCTGTGGAAGTGAAGATACAGTCAAGATCCTCACCTCCATCATGCCACCCCTCCACCAATAAATCC TGGAGGACCGAGGCCAGTGTCTTTACTCTACAGCATTAAAGCAATGGCATCAACCATTCCCTCTACC CTGAATGGTGCCCATCGCCACCACAGAGATTCAGCAATGGCCTGCCTCCTCCACATCGTCAGCACTAA CGAATCAACAGCTGCCGCTACTTGTGGTGTCTCGGCAGCTCAGCAAGTTGAAACGCTTCTCACCCTCT GCAGCAGTTTGGCAATGATATCTCACCTGAGATCGGCAGAAAGTTTCGGACTCTCGTTCTAGCCTTGGTGA AACTCAACAGTAAACAATTGAAGAATTCATTGCAAGCTCCAGGAGGCCACAACTTCTCTTTCGTCAT TTGTGATTCATTTCTCAAGGCCAACCTGCCCTGCTGCAGCGAGAAGTCTGACTGTGCCGGGCTGC CAAGCAGACCCCGTCCCAGTACCTGGCCAGCATGAGCACCTTCTGCTCAACACCAGTATCGCATCTCT GCTGACTCTTCTGAAGTCTCATGGAGTTTCATGGAAATGGAAAGAGGCCAGTCCGGAAAGGAGGGACG AGAATAATTTTGAAGAGATACAGTTTCTCCTGAACCGCCTGCCAAGAGAGTGTGTACTATCAGCCCTGC TCCTCGGCACAGTCCCGCCCTACTGTTCCCTTATGAATCCTGGGGGCCAGTTCATCCTACTCCACCA CCTCTTCAGCACTATACACTAGAAGACATTGCAACTTCTCACCTGTATCGGGAACCAACAAGATGCTAG AACACCGAGAAGTTCTGTGAGAGGCCACAATCTTAGTCTCAATGGAGGCTATCAAGATGAGTTGGTAGA CCACCGTTTGACAGAAAGGGAGTGGGCTGATGAATGGAACACCTTGACCATGCACTGAATTGCATTATG GAAATGGTAGAGAAAAC TAGCGCTCCATGGCAGTTCTGAGGCGCTGTCAGGAATCTGACCGTGAAGAAC TCAACTTTGAAACGGCGTTTAAATGAAAATACAGAGTTGAGGAAAAC TGGGACTGAGTTGGTCTCTAG GCAGCACAGCCCTGGGAGTACAGATTCTCTCAGCAACGATTCTCAGCGGGAATTTACCAGTAGACCAGCA ACAGGATATGTGCTGTGGAGTTTTTGAAGAAAACAGAAAGCCGTGAATAAGGTGAAAATTCAGGCCA TGTGAGAGGTACAGAAGGCTGTAGTGTGAGGCAGAGCAAAAAGCCTTTGAAGTGATTGCAACGGAGAGAGC TCGAATGGAGCAGACCATAGCGGATGTCAAACGGCAGGCTGCAGAAGATGCTTTCCTGGTCAATGAG CAAGAAGAGTCCACAGAGAACTGCTGGAAGTGTGGCCGAAAAGCCAGTGAGACGTGCACTGGCTGCAACA TTGCTCGTACTGCGGCTCCTTCTGCCAGCATAAGGACTGGGAGCGGCACCACCGCCTCTGTGGCCAGAG TCTACATGGCCACAGTCCCACAGCCAGAGCAGGCCACTGCTCCCTGGAGGGCGGGGCTCAGCCAGGTCT GCTGACTGCAGTGTGCCAGCCAGCCCTGGACAAGACCTCAGCTACCACCTCACGGTCTCAACACCTG CCTCTGTGACAGCCATTGATGCCAACGGGCTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>MG209247 representing NM\_172860  
 Red=Cloning site Green=Tags(s)

MVGVPGAAAFQLGCEKRV PAMP GSPVEVKIQSRSSPPIMPLPPINPGGPRPVSFTPTAL SNGINHSPPT LNGAPSPQRF SNGPASSTSSAL TNQQLPATCGARQLSKLKRFLTTLQQFGNDISPEIGEKVRTLVLALV NSTVTIEEFHCKLQEATNF LRPFVIPFLKANLPLLQRELLHCARA AKQTPSQYLAQHEHLLNLSIASP ADSSELLMEVHGNGKRSPERRDENNFERDTPPEPPAKRVCTISPAPRHSPAL TVPLMNPGGQFHPTPP PLQHYTLEDIATSHLYREP NKMLEHREVRERHNL SLNGGYQDELVDHRL TEREWADWKHL DHALNCIM EMVEKTRRSM AVLRRQCESDREELNYWKRRFNEN TELRKGTGELVSRQHSPGSTDLSNDSQREFTSRPA TGYVPVEFWKKTEEAVNKVKIQAMSEVQKAVAEAEQKAFEVIATERARMEQTIADVKRQAAEDAF L VINE QEESTENCWNCGRKASETCSGCNIARYCGSFQCHKDWERHHRLCGQSLHGSPHSQSRPLLPGGRG SARS ADCSVSPALDKTSATTSRSSTPASVTAIDANGL

TRTRPLE – GFP Tag – V

**Restriction Sites:**

SgfI-MluI



<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_172860.2</a> , <a href="#">NP_766448.1</a>
<b>RefSeq Size:</b>	6067 bp
<b>RefSeq ORF:</b>	1785 bp
<b>Locus ID:</b>	12396
<b>UniProt ID:</b>	<a href="#">O70374</a>
<b>Cytogenetics:</b>	2 H1
<b>Gene Summary:</b>	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 mannerCan 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]