

## Product datasheet for **MG222281**

### **Cbfb (NM\_001161457) Mouse Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cbfb (NM\_001161457) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Cbfb  
**Synonyms:** AI893578; PEA2; Pebp2; PEBP2b; Pebbp2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG222281 representing NM\_001161457  
**Red**=Cloning site **Blue**=ORF **Green**=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCGCGTCGTCCTCCGGACCAGAGGACAAAGTTCGAGAACGAGGAGTCTTCAGGAAGCTGAGCCGCG  
AGTGCAGATTAAGTACACGGGCTTCAGGGACCGCCACGAGGAGCGCCAGACACGCTCCAGAACGC  
CTGCCGACGGTCGCTCGGAGATCGCTTTTGTGGCTACAGGAACCAATCTGTCTCTCCAGTTTTTCCG  
GCCAGCTGGCAGGAGAACAGCGACAAACACCTAGCCGGAATATGTCGACTTAGAGAGAGAAGCAGGCA  
AGGTATACTTGAAGGCTCCCATGATTCTGAATGGAGTGTGTGTTATATGGAAGGGCTGGATTGATCTCCA  
CAGATTGGATGGTATGGGTTGCCTGGAGTTTATGAGGAGCGAGCCAGGCAAGAAGACAGCAAGACCCCT  
AGTCTGGTTCTAACTTAGTGCGGTGATGATCTCAAACCTTCGT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG222281 representing NM\_001161457  
**Red**=Cloning site **Green**=Tags(s)

MPRVVPDQRSKFENEFFRKLRSRECEIKYTGFRDRPHEERQTRFQNAACDRSEIAFVATGTNLSLQFFP  
ASWQGEQRQTPSREYVDLEREAGKVYLKAPMILNGVCVIWKGWIDLHRLDGMGLEFDEERAQARRQDP  
SPGSNLGGDDLKLR

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI



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<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>	<u><a href="#">NM_001161457.1</a></u> , <u><a href="#">NP_001154929.1</a></u>
<b>RefSeq Size:</b>	2797 bp
<b>RefSeq ORF:</b>	468 bp
<b>Locus ID:</b>	12400
<b>UniProt ID:</b>	<u><a href="#">Q08024</a></u>
<b>Cytogenetics:</b>	8 53.04 cM
<b>Gene Summary:</b>	Forms the heterodimeric complex core-binding factor (CBF) with RUNX family proteins (RUNX1, RUNX2, and RUNX3). RUNX members modulate the transcription of their target genes through recognizing the core consensus binding sequence 5'-TGTGGT-3', or very rarely, 5'-TGCGGT-3', within their regulatory regions via their runt domain, while CBF is a non-DNA-binding regulatory subunit that allosterically enhances the sequence-specific DNA-binding capacity of RUNX. The heterodimers bind to the core site of a number of enhancers and promoters, including murine leukemia virus, polyomavirus enhancer, T-cell receptor enhancers, LCK, IL3 and GM-CSF promoters (Probable). CBF complexes repress ZBTB7B transcription factor during cytotoxic (CD8+) T cell development. They bind to RUNX-binding sequence within the ZBTB7B locus acting as transcriptional silencer and allowing for cytotoxic T cell differentiation (PubMed:18258917).[UniProtKB/Swiss-Prot Function]