

Product datasheet for **MC226723**

Cebpb (NM_001287738) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Cebpb (NM_001287738) Mouse Untagged Clone
Tag: Tag Free
Symbol: Cebpb
Synonyms: C/EBPbeta; CRP2; IL-6DBP; LAP; LIP; NF-IL6; NF-M; Nfil6
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC226723 representing NM_001287738
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAAGTGGCAACTTCTACTACGAGCCCGACTGCCTGGCTACGGGGCAAGCGGCCCGCCGCGCCGCGC
CGCGCGCCCCCGCCGAGCCGGCCATTGGCGAGCACGAGCGCCATCGACTTCAGCCCCTACCTGGA
GCCGCTCGCGCCCGCCGGACTTCGCCGCGCCCGCCGCGCACACGACTTCTCTCGACCTCTTC
GCCGACGACTACGGCGCCAAGCCGAGCAAGAAGCCGGCCGACTACGGTTACGTGAGCCTCGCCCGCGCG
GCGCCAAGGCCGCGCCGCCCGCTGCTTCCCGCCCGCCCTCCCGCCGCGCTCAAGGCGGAGCCGGCTT
CGAACCCGCGGACTGCAAGCGCGCGGACGACGCGCCCGCCATGGCGGCCGGTTTCCCGTTTCGCCCTGCGC
GCCTACCTGGGCTACCAGGCGACGCCGAGCGGCAGCAGCGGCAGCCTGTCCACGTGTCGTGTCAGCC
CGCCCGGACGCCGAGCCCCCGGACGCCAAGGCCGCGCCCGCCGCTTTCGCGGGGCCGCGGCCGCG
GCCCCCAAGGCCAAGGCCAAGAAGACGGTGGACAAGCTGAGCGACGAGTACAAGATGCGGCGGAGCGC
AACAAATCGCGGTGCGCAAGAGCCGCGACAAGGCCAAGATGCGCAACCTGGAGACGCAGCACAAGGTGC
TGGAGCTGACGGCGGAGAACGAGCGGCTGCAGAAGAAGTGGAGCAGCTGTCGCGAGAGCTCAGCACCT
GCGGAACCTGTTCAGCAGCTGCCGAGCCGCTGCTGGCTCGGGGGCCACTGC**TAG**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001287738
Insert Size: 828 bp



OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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:	<ol style="list-style-type: none">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:	<u>NM_001287738.1</u> , <u>NP_001274667.1</u>
RefSeq Size:	1518 bp
RefSeq ORF:	828 bp
Locus ID:	12608
UniProt ID:	<u>P28033</u>
Cytogenetics:	2 87.58 cM

Gene Summary:

Important transcription factor regulating the expression of genes involved in immune and inflammatory responses (PubMed:16585579, PubMed:17911624, PubMed:18486321, PubMed:20111005). Plays also a significant role in adipogenesis, as well as in the gluconeogenic pathway, liver regeneration, and hematopoiesis (PubMed:9727068, PubMed:10635333, PubMed:17301242, PubMed:17601773, PubMed:19478079, PubMed:24061474, PubMed:24216764). The consensus recognition site is 5'-T[TG]NNGNAA[TG]-3'. Its functional capacity is governed by protein interactions and post-translational protein modifications. During early embryogenesis, plays essential and redundant functions with CEBPA (PubMed:15509779). Has a prometotic effect on many cell types such as hepatocytes and adipocytes but has an antiproliferative effect on T-cells by repressing MYC expression, facilitating differentiation along the T-helper 2 lineage (PubMed:9727068, PubMed:10635333, PubMed:16585579). Binds to regulatory regions of several acute-phase and cytokines genes and plays a role in the regulation of acute-phase reaction and inflammation. Plays also a role in intracellular bacteria killing (PubMed:17911624). During adipogenesis, is rapidly expressed and, after activation by phosphorylation, induces CEBPA and PPARG, which turn on the series of adipocyte genes that give rise to the adipocyte phenotype. The delayed transactivation of the CEBPA and PPARG genes by CEBPB appears necessary to allow mitotic clonal expansion and thereby progression of terminal differentiation (PubMed:15985551, PubMed:17301242, PubMed:17601773, PubMed:20194620). Essential for female reproduction because of a critical role in ovarian follicle development (PubMed:9303532). Restricts osteoclastogenesis (PubMed:19440205). Together with NFE2L1; represses expression of DSPP during odontoblast differentiation (By similarity).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) encodes multiple isoforms through the use of alternative translation initiation codons. The isoform (b, also known as LAP) represented in this RefSeq results from translation initiation at the second in-frame AUG start codon. Isoform b has a shorter N-terminus, compared to isoform a. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.