

Product datasheet for MR228934

Cebpb (NM 001287738) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Cebpb (NM_001287738) Mouse Tagged ORF Clone

Tag: Myc-DDK
Symbol: Cebpb

Synonyms: C/EBPbeta; CRP2; IL-6DBP; LAP; LIP; NF-IL6; NF-M; Nfil6

Mammalian Cell N

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

ORF Nucleotide >MR228934 representing NM_001287738 Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

GCGGAACTTGTTCAAGCAGCTGCCCGAGCCGCTGCTGGCCTCGGCGGGCCACTGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



Protein Sequence: >MR228934 representing NM_001287738

Red=Cloning site Green=Tags(s)

MEVANFYYEPDCLAYGAKAARAAPRAPAAEPAIGEHERAIDFSPYLEPLAPAADFAAPAPAHHDFLSDLF ADDYGAKPSKKPADYGYVSLGRAGAKAAPPACFPPPPPAALKAEPGFEPADCKRADDAPAMAAGFPFALR AYLGYQATPSGSSGSLSTSSSSSPPGTPSPADAKAAPAACFAGPPAAPAKAKAKKTVDKLSDEYKMRRER NNIAVRKSRDKAKMRNLETQHKVLELTAENERLQKKVEQLSRELSTLRNLFKQLPEPLLASAGHC

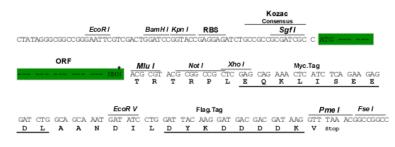
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_001287738

ORF Size: 825 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: <u>NM 001287738.1</u>, <u>NP 001274667.1</u>

RefSeq Size: 1518 bp
RefSeq ORF: 828 bp
Locus ID: 12608

 UniProt ID:
 P28033

 Cytogenetics:
 2 87.58 cM

 MW:
 29.6 kDa

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 promitotic 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

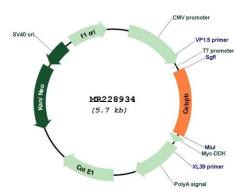
(PubMed:17911624). During adipogenesis, is rapidly expressed and, after activation by phosphorylation, induces CEBPA and PPARG, which turn on the series of adipocyte genes that give rise to the adipocyte phenotype. The delayed transactivation of the CEBPA and PPARG genes by CEBPB appears necessary to 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]



Product images:



Circular map for MR228934