

## **Product datasheet for RC218955**

# CEBP Alpha (CEBPA) (NM\_004364) Human Tagged ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: CEBP Alpha (CEBPA) (NM\_004364) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: CEBP Alpha

**Synonyms:** C/EBP-alpha; CEBP

Mammalian Cell

Selection:

Neomycin

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

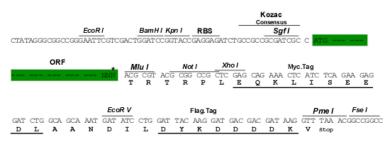
Chromatograms: <a href="https://cdn.origene.com/chromatograms/mg3801\_e05.zip">https://cdn.origene.com/chromatograms/mg3801\_e05.zip</a>

**Restriction Sites:** Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shuttling:





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_004364

ORF Size: 1074 bp



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**OTI Disclaimer:** 

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:customport@origene.com">customport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.

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.

Note:

Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: <u>NM 004364.5</u>

 RefSeq Size:
 2385 bp

 RefSeq ORF:
 1077 bp

 Locus ID:
 1050

 UniProt ID:
 P49715

 Cytogenetics:
 19q13.11

Protein Families: Druggable Genome, ES Cell Differentiation/IPS
Protein Pathways: Acute myeloid leukemia, Pathways in cancer

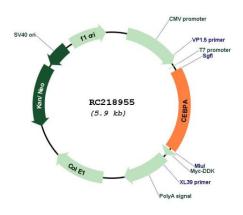
MW: 37.4 kDa



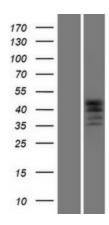
#### **Gene Summary:**

This intronless gene encodes a transcription factor that contains a basic leucine zipper (bZIP) domain and recognizes the CCAAT motif in the promoters of target genes. The encoded protein functions in homodimers and also heterodimers with CCAAT/enhancer-binding proteins beta and gamma. Activity of this protein can modulate the expression of genes involved in cell cycle regulation as well as in body weight homeostasis. Mutation of this gene is associated with acute myeloid leukemia. The use of alternative in-frame non-AUG (GUG) and AUG start codons results in protein isoforms with different lengths. Differential translation initiation is mediated by an out-of-frame, upstream open reading frame which is located between the GUG and the first AUG start codons. [provided by RefSeq, Dec 2013]

### **Product images:**

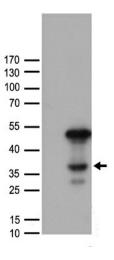


Circular map for RC218955



Western validation with an anti-DDK antibody; L: Control HEK293 lysate R: Over-expression lysate





HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CEBPA (Cat# RC218955, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CEBPA antibody (Cat# [TA890066]). Positive lysates [LY418038] (100ug) and [LC418038] (20ug) can be purchased separately from OriGene.