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Product datasheet for SC303472

CEBP Alpha (CEBPA) (NM_004364) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CEBP Alpha (CEBPA) (NM_004364) Human Untagged Clone
Tag:	Tag Free
Symbol:	CEBP Alpha
Synonyms:	C/EBP-alpha; CEBP
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC303472 sequence for NM_004364 edited (data generated by NextGen Sequencing)

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ATGGAGTCGGCCGACTTCTACGAGGCGGAGCCGCGGCCCCCGATGAGCAGCCACCTGCAG
AGCCCCCCGCACGCGCCCAGCAGCGCCGCCTTCGGCTTTCCCCGGGGCGCGGGCCCCGCG
CAGCCTCCCGCCCCACCTGCCGCCCCGGAGCCGCTGGGCGGCATCTGCGAGCACGAGACG
TCCATCGACATCAGCGCCTACATCGACCCGGCCGCCTTCAACGACGAGTTCCTGGCCGAC
CTGTTCCAGCACAGCCGGCAGCAGGAGAAGGCCAAGGCGGCCGTGGGCCCCACGGGCGGC
GGCGGCGGCGGCGACTTTGACTACCCGGGCGCGCCCGCGGGCCCCGGCGGCGCCGTCATG
CCCGGGGGAGCGCACGGGCCCCCGCCCGGCTACGGCTGCGCGGCCGCCGGCTACCTGGAC
GGCAGGCTGGAGCCCCTGTACGAGCGCGTCGGGGGCGCCGGCGCTGCGGCCGCTGGTGATC
AAGCAGGAGCCCCGCGAGGAGGATGAAGCCAAGCAGCTGGCGCTGGCCGGCCTCTTCCCT
TACCAGCCGCCGCCGCCGCCGCCGCCCTCGCACCCGCACCCGCACCCGCCGCCCGCGCAC
CTGGCCGCCCCGCACCTGCAGTTCCAGATCGCGCACTGCGGCCAGACCACCATGCACCTG
CAGCCCGGTCACCCCACGCCGCCGCCCACGCCCGTGCCCAGCCCGCACCCCGCGCCCGCG
CTCGGTGCCGCCGGCCTGCCGGGCCCTGGCAGCGCGCTCAAGGGGCTGGGCGCCGCGCAC
CCCGACCTCCGCGCGAGTGGCGGCAGCGGCGCGGGCAAGGCCAAGAAGTCGGTGGACAAG
AACAGCAACGAGTACCGGGTGCGGCGCGAGCGCAACAACATCGCGGTGCGCAAGAGCCGC
GACAAGGCCAAGCAGCGCAACGTGGAGACGCAGCAGAAGGTGCTGGAGCTGACCAGTGAC
AATGACCGCCTGCGCAAGCGGGTGGAACAGCTGAGCCGCGAACTGGACACGCTGCGGGGC
ATCTTCCGCCAGCTGCCAGAGAGCTCCTTGGTCAAGGCCATGGGCAACTGCGCGTGA
```

Clone variation with respect to NM_004364.3

View online »

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_004364 unedited
CCCTTATGGAGTCGGCCGACTTCTACGAGGCGGAGCCGCGGCCCCCGATGAGCAGCCACC
TGCAGAGCCCCCCGCACGCGCCCAGCAGCGCCGCCTTCGGCTTTCCCCGGGGCGCGGGCC
CCGCGCAGCCTCCCGCCCCACCTGCCGCCCCGGAGCCGCTGGGCGGCATCTGCGAGCACG
AGACGTCCATCGACATCAGCGCCTACATCGACCCGGCCGCCTTCAACGACGAGTTCCTGG
CCGACCTGTTCCAGCACAGCCGGCAGCAGGAGAAGGCCAAGGCGGCCGTGGCCCCACGGG
CGG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_004364 unedited
GTTCAGGAAAAGCTATGACCGCGGCCGCAATCTAGAGTCGACAAGCTTGATATCGGTACC
AGATCTGAATTCGCCCTTGCACCGGAATCTCCTAGTCCTGGCTCGCACGGCTCGGGCAAG
CCTCGAGATCCGGCGACCCCAAACCACTCCCTGGGTCCCCGCCGGAGGCTGGCCCAGGGC
GGTCCCACAGCCGCGCGCCTCACGCGCAGTTGCCCATGGCCTTGACCAAGGAGCTCTCTG
GCAGCTGGCGGAAGATGCCCCGCAGCGTGTCCAGTTCGCGGCTCAGCTGTTCCACCCGCT
TGCGCAGGCGGTCATTGTCACTGGTCAGCTCCAGCACCTTCTGCTGCGTCTCCACGTTGC
GCTGCTTGGCCTTGTCGCGGCTCTTGCGCACCGCGATGTTGTTGCGCTCGCGCCGCACCC
GGTACTCGTTGCTGTTCTTGTCCACCGACTTCTTGGCCTTGCCCGCGCCGCTGCCGCCAC
TCGCGCGGAGGTCGGGGTGCGCGGCGCCCAGCCCCTTGAGCGCGCTGCCAGGGCCCGGCA
GGCCGGCGGCACCGAGCGCGGGCGCGGGGTGCGGGCTGGGCACGGGCGTGGGCGGCGGCG
TGGGGTGACCGGGCTGCAGGTGCATGGTGGTCTGGCCGCAGTGCGCGATCTGGAACTGCA
GGTGCGGGGCGGCCAGGTGCGCGGGCGGCGGGTGCGGGTGCGGTCCAAAAGGGCGGNNNN
NNNNNNNNNNNNNNNN

Restriction Sites: Please inquire

ACCN: NM_004364

Insert Size: 1077 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: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: NM_004364.2, NP_004355.2

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
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] Transcript Variant: This variant (1) can initiate translation from an upstream non-AUG (GUG) site, and also from three downstream, in-frame AUG sites. The isoform (a, also known as C/EBP-42) represented in this RefSeq results from translation initiation at the first AUG start codon. Isoform a has a shorter N-terminus, compared to isoform c. 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.