# SiRNA and qPCR Primer Design of Cepbα

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**Target Gene Information**

Protein Name : **CCAAT/enhancer-binding protein alpha**

Gene Name : **Cebpɑ**

Organism : *Mus musculus (Mouse)*

Description : 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. [provided by RefSeq, Sep 2014]

Source : <https://www.ncbi.nlm.nih.gov/nuccore/NM_007678.3>

Accession ID : NM\_007678.3

**SiRNA** ( designed by BLOCK\_iT RNAi Designer)

SiRNA 1 : SiCEBPa\_MX1

Targer Sequence: 5’- GCCGCTGGTGATCAAACAA-3’

SiRNA : 5’ GCCGCUGGUGAUCAAACAA 3’

5’ UUGUUUGAUCACCAGCGGC 3’

SiRNA 2 : SiCEBPa\_MX2

Targer Sequence: 5’- CCGAGATAAAGCCAAACAA-3’

SiRNA : 5’ CCGAGAUAAAGCCAAACAA 3’

5’ UUGUUUGGCUUUAUCUCGG 3’

Source : https://rnaidesigner.thermofisher.com/rnaiexpress/design.do

**qPCR Primers** ( designed by Primer and GeneBank )

Primer 1 : PriCEBPa\_MX1

Amplication size: 130

Forward Primer :GAGGAGGACGAGGCGAAGCA616 to 635

Reverse Primer : CGATCTGGAACTGCAAGTGGG725 to 745

Primer 2 : PriCEBPa\_MX2

Amplication size: 124

Forward Primer :CAAGAACAGCAACGAGTACCG 966 to 986

Reverse Primer : GTCACTGGTCAACTCCAGCAC 1069 to 1089

**Target Total Sequence**

gene 1..2651

[exon](https://www.ncbi.nlm.nih.gov/nuccore/NM_001287523.1?from=1&to=2636) 1..2636

CDS 127..1206

polyA\_site 2636

ORIGIN

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61 cagcggcgcc acgcgcaggc tggaggccgc cgaggctcgc catgccggga gaactctaac

121 tccccc…/atgg agtcggccga cttctacgag gtggagccgc ggcccccgat gagcagtcac

181 ctccagagcc ccccgcacgc gcccagcaac gccgcctttg gctttccccg gggcgcgggc

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2041 cacaatcgat ccatcccaga gggactggag ttatgacaag cttcccaaat attttgcttt

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2581 gtttcatgct agatgtcgta tgtattatat ctataatata aacatatcaa actcaaaaaa

2641 aaaaaaaaaa a

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