

Product datasheet for TF316491

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

CEBP Alpha (CEBPA) Human shRNA Plasmid Kit (Locus ID 1050)

Product data:

Product Type: shRNA Plasmids

Product Name: CEBP Alpha (CEBPA) Human shRNA Plasmid Kit (Locus ID 1050)

Locus ID: 1050

Synonyms: C/EBP-alpha; CEBP

Vector: pRFP-C-RS (TR30014)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Retroviral plasmids

CEBPA - Human, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID = 1050).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.

RefSeq: NM 001285829, NM 001287424, NM 001287435, NM 004364, NM 004364.1, NM 004364.2,

NM 004364.3, NM 004364.4, NM 001285829.1, NM 001287435.1, NM 001287424.1,

BC027902, BC063874, BC160133, NM 004364.5, NM 001287424.2

UniProt ID: P49715

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 AUC start codens results in protein informs with different lengths. Differential

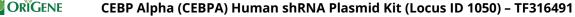
and AUG start codons results in protein isoforms with different lengths. Differential translation initiation is mediated by an out-of-frame, upstream open reading frame which is

located between the GUG and the first AUG start codons. [provided by RefSeq, Dec 2013]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.







Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).