Datasheet for ABIN7553411

CEBPA Protein (AA 1-358) (His tag)

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Overview

Quantity:	1 mg
Target:	CEBPA
Protein Characteristics:	AA 1-358
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CEBPA protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat CEBPA Protein expressed in mammalien cells.
Sequence:	MESADFYEAE PRPPMSSHLQ SPPHAPSSAA FGFPRGAGPA QPPAPPAAPE PLGGICEHET SIDISAYIDP AAFNDEFLAD LFQHSRQQEK AKAAVGPTGG GGGGDFDYPG APAGPGGAVM PGGAHGPPPG YGCAAAGYLD GRLEPLYERV GAPALRPLVI KQEPREEDEA KQLALAGLFP YQPPPPPPPS HPHPHPPPAH LAAPHLQFQI AHCGQTTMHL QPGHPTPPPT PVPSPHPAPA LGAAGLPGPG SALKGLGAAH PDLRASGGSG AGKAKKSVDK NSNEYRVRRE RNNIAVRKSR DKAKQRNVET QQKVLELTSD NDRLRKRVEQ LSRELDTLRG IFRQLPESSL VKAMGNCA **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Characteristics:	Key Benefits:

Product Details

	• Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
Grade:	custom-made

Target Details

Target:	CEBPA
Alternative Name:	CEBPA (CEBPA Products)
Background:	CCAAT/enhancer-binding protein alpha (C/EBP alpha),FUNCTION: Transcription factor that coordinates proliferation arrest and the differentiation of myeloid progenitors, adipocytes, hepatocytes, and cells of the lung and the placenta. Binds directly to the consensus DNA sequence 5'-T[TG]NNGNAA[TG]-3' acting as an activator on distinct target genes (PubMed:11242107). During early embryogenesis, plays essential and redundant functions with CEBPB. Essential for the transition from common myeloid progenitors (CMP) to granulocyte/monocyte progenitors (GMP). Critical for the proper development of the liver and the lung (By similarity). Necessary for terminal adipocyte differentiation, is required for postnatal maintenance of systemic energy homeostasis and lipid storage (By similarity). To regulate these different processes at the proper moment and tissue, interplays with other transcription factors and modulators. Down-regulates the expression of genes that maintain cells in an undifferentiated and proliferative state through E2F1 repression, which is critical for its ability to induce adipocyte and granulocyte terminal differentiation. Reciprocally E2F1 blocks adipocyte differentiation by binding to specific promoters and repressing CEBPA binding to its

Target Details

	target gene promoters. Proliferation arrest also depends on a functional binding to SWI/SNF complex (PubMed:14660596). In liver, regulates gluconeogenesis and lipogenesis through different mechanisms. To regulate gluconeogenesis, functionally cooperates with FOXO1 binding to IRE-controlled promoters and regulating the expression of target genes such as PCK1 or G6PC1. To modulate lipogenesis, interacts and transcriptionally synergizes with SREBF1 in promoter activation of specific lipogenic target genes such as ACAS2. In adipose tissue, seems to act as FOXO1 coactivator accessing to ADIPOQ promoter through FOXO1 binding sites (By similarity). {ECO:0000250|UniProtKB:P05554, ECO:0000250|UniProtKB:P53566, ECO:0000269|PubMed:11242107, ECO:0000269|PubMed:14660596}., FUNCTION: [Isoform 3]: Can act as dominant-negative. Binds DNA and have transctivation activity, even if much less efficiently than isoform 2. Does not inhibit cell proliferation (PubMed:14660596). {ECO:0000250|UniProtKB:P05554, ECO:0000250|UniProtKB:P53566, ECO:0000269|PubMed:14660596}., FUNCTION: [Isoform 4]: Directly and specifically enhances ribosomal DNA transcription interacting with RNA polymerase I-specific cofactors and inducing histone acetylation. {ECO:0000269|PubMed:20075868}.
Molecular Weight:	37.6 kDa
UniProt:	P49715
Pathways:	Brown Fat Cell Differentiation, Positive Regulation of fat Cell Differentiation

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.

Handling

Expiry Date:	12 months