

Datasheet for ABIN7553347 **CEBPB Protein (AA 1-345) (His tag)**



Overview

Quantity:	1 mg
Target:	CEBPB
Protein Characteristics:	AA 1-345
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CEBPB protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant CEBPB Protein expressed in mammalian cells.
Sequence:	MQRLVAWDPA CLPLPPPPPA FKSMEVANFY YEADCLAAAY GGKAAPAAPP AARPGPRPPA
	GELGSIGDHE RAIDFSPYLE PLGAPQAPAP ATATDTFEAA PPAPAPAPAS SGQHHDFLSD
	LFSDDYGGKN CKKPAEYGYV SLGRLGAAKG ALHPGCFAPL HPPPPPPPP AELKAEPGFE
	PADCKRKEEA GAPGGGAGMA AGFPYALRAY LGYQAVPSGS SGSLSTSSSS SPPGTPSPAD
	AKAPPTACYA GAAPAPSQVK SKAKKTVDKH SDEYKIRRER NNIAVRKSRD KAKMRNLETQ
	HKVLELTAEN ERLQKKVEQL SRELSTLRNL FKQLPEPLLA SSGHC Sequence without tag. The
	proposed Purification-Tag is based on experiences with the expression system, a differen
	complexity of the protein could make another tag necessary. In case you have a special
	request, please contact us.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:

- · Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalian 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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

Target Details

Target:	CEBPB
Alternative Name:	CEBPB (CEBPB Products)
Background:	CCAAT/enhancer-binding protein beta (C/EBP beta) (Liver activator protein) (LAP) (Liver-

CCAAT/enhancer-binding protein beta (C/EBP beta) (Liver activator protein) (LAP) (Liver-enriched inhibitory protein) (LIP) (Nuclear factor NF-IL6) (Transcription factor 5) (TCF-5),FUNCTION: Important transcription factor regulating the expression of genes involved in immune and inflammatory responses (PubMed:1741402, PubMed:9374525, PubMed:12048245, PubMed:18647749). Also plays a significant role in adipogenesis, as well as in the gluconeogenic pathway, liver regeneration, and hematopoiesis. The consensus recognition site is 5'-T[TG]NNGNAA[TG]-3'. Its functional capacity is governed by protein interactions and post-translational protein modifications. During early embryogenesis, plays essential and redundant roles with CEBPA. Has a promitotic effect on many cell types such as hepatocytes and adipocytes but has an antiproliferative effect on T-cells by repressing MYC expression, facilitating differentiation along the T-helper 2 lineage. Binds to regulatory regions of several acute-phase and cytokines genes and plays a role in the regulation of acute-phase reaction and inflammation. Also plays a role in intracellular bacteria killing (By similarity). During

adipogenesis, is rapidly expressed and, after activation by phosphorylation, induces CEBPA and

PPARG, which turn on the series of adipocyte genes that give rise to the adipocyte phenotype. The delayed transactivation of the CEBPA and PPARG genes by CEBPB appears necessary to allow mitotic clonal expansion and thereby progression of terminal differentiation (PubMed:20829347). Essential for female reproduction because of a critical role in ovarian follicle development (By similarity). Restricts osteoclastogenesis: together with NFE2L1, represses expression of DSPP during odontoblast differentiation (By similarity). {ECO:0000250|UniProtKB:P21272, ECO:0000250|UniProtKB:P28033,

ECO:0000269|PubMed:12048245, ECO:0000269|PubMed:18647749,

ECO:0000269|PubMed:20829347, ECO:0000269|PubMed:9374525,

ECO:0000303|PubMed:25451943}., FUNCTION: [Isoform 2]: Essential for gene expression induction in activated macrophages. Plays a major role in immune responses such as CD4(+) T-cell response, granuloma formation and endotoxin shock. Not essential for intracellular bacteria killing. {ECO:0000250|UniProtKB:P28033}., FUNCTION: [Isoform 3]: Acts as a dominant negative through heterodimerization with isoform 2 (PubMed:11741938). Promotes osteoblast differentiation and osteoclastogenesis (By similarity). {ECO:0000250|UniProtKB:P21272, ECO:0000250|UniProtKB:P28033, ECO:0000269|PubMed:11741938}.

Molecular Weight:	36.1 kDa
UniProt:	P17676

Pathways: Interferon-gamma Pathway, Autophagy, Brown Fat Cell Differentiation

Application Details

Application Notes:	We expect the protein to work for functional studies. 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.
Expiry Date:	12 months