

# Datasheet for ABIN7545428 **ZBTB7A Protein (AA 1-584) (His tag)**



### Overview

Quantity:	1 mg
Target:	ZBTB7A
Protein Characteristics:	AA 1-584
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ZBTB7A protein is labelled with His tag.

Product Details	
Purpose:	Custom-made recombinant ZBTB7A Protein expressed in mammalian cells.
Sequence:	MAGGVDGPIG IPFPDHSSDI LSGLNEQRTQ GLLCDVVILV EGREFPTHRS VLAACSQYFK
	KLFTSGAVVD QQNVYEIDFV SAEALTALMD FAYTATLTVS TANVGDILSA ARLLEIPAVS
	HVCADLLDRQ ILAADAGADA GQLDLVDQID QRNLLRAKEY LEFFQSNPMN SLPPAAAAAA
	ASFPWSAFGA SDDDLDATKE AVAAAVAAVA AGDCNGLDFY GPGPPAERPP TGDGDEGDSN
	PGLWPERDED APTGGLFPPP VAPPAATQNG HYGRGGEEEA ASLSEAAPEP GDSPGFLSGA
	AEGEDGDGPD VDGLAASTLL QQMMSSVGRA GAAAGDSDEE SRADDKGVMD YYLKYFSGAH
	DGDVYPAWSQ KVEKKIRAKA FQKCPICEKV IQGAGKLPRH IRTHTGEKPY ECNICKVRFT
	RQDKLKVHMR KHTGEKPYLC QQCGAAFAHN YDLKNHMRVH TGLRPYQCDS CCKTFVRSDH
	LHRHLKKDGC NGVPSRRGRK PRVRGGAPDP SPGATATPGA PAQPSSPDAR RNGQEKHFKD
	EDEDEDVASP DGLGRLNVAG AGGGGDSGGG PGAATDGNFT AGLA 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

#### **Product Details**

	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:
	<ul> <li>Made to order protein - from design to production - by highly experienced protein experts.</li> <li>Protein expressed in mammalian cells and purified in one-step affinity chromatography</li> <li>The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.</li> <li>State-of-the-art algorithm used for plasmid design (Gene synthesis).</li> </ul>
	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:	ZBTB7A
Alternative Name:	ZBTB7A (ZBTB7A Products)
Background:	Zinc finger and BTB domain-containing protein 7A (Factor binding IST protein 1) (FBI-1) (Factor
	that binds to inducer of short transcripts protein 1) (HIV-1 1st-binding protein 1)
	(Leukemia/lymphoma-related factor) (POZ and Krueppel erythroid myeloid ontogenic factor)
	(POK erythroid myeloid ontogenic factor) (Pokemon) (Pokemon 1) (TTF-I-interacting peptide
	21) (TIP21) (Zinc finger protein 857A),FUNCTION: Transcription factor that represses the
	transcription of a wide range of genes involved in cell proliferation and differentiation
	(PubMed:14701838, PubMed:17595526, PubMed:20812024, PubMed:25514493,
	PubMed:26455326, PubMed:26816381). Directly and specifically binds to the consensus

sequence 5'-[GA][CA]GACCCCCCC-3' and represses transcription both by regulating the

organization of chromatin and through the direct recruitment of transcription factors to gene

regulatory regions (PubMed:12004059, PubMed:17595526, PubMed:20812024, PubMed:25514493, PubMed:26816381). Negatively regulates SMAD4 transcriptional activity in the TGF-beta signaling pathway through these two mechanisms (PubMed:25514493). That is, recruits the chromatin regulator HDAC1 to the SMAD4-DNA complex and in parallel prevents the recruitment of the transcriptional activators CREBBP and EP300 (PubMed:25514493). Collaborates with transcription factors like RELA to modify the accessibility of gene transcription regulatory regions to secondary transcription factors (By similarity). Also directly interacts with transcription factors like SP1 to prevent their binding to DNA (PubMed:12004059). Functions as an androgen receptor/AR transcriptional corepressor by recruiting NCOR1 and NCOR2 to the androgen response elements/ARE on target genes (PubMed:20812024). Thereby, negatively regulates androgen receptor signaling and androgeninduced cell proliferation (PubMed:20812024). Involved in the switch between fetal and adult globin expression during erythroid cells maturation (PubMed:26816381). Through its interaction with the NuRD complex regulates chromatin at the fetal globin genes to repress their transcription (PubMed:26816381). Specifically represses the transcription of the tumor suppressor ARF isoform from the CDKN2A gene (By similarity). Efficiently abrogates E2F1dependent CDKN2A transactivation (By similarity). Regulates chondrogenesis through the transcriptional repression of specific genes via a mechanism that also requires histone deacetylation (By similarity). Regulates cell proliferation through the transcriptional regulation of genes involved in glycolysis (PubMed:26455326). Involved in adipogenesis through the regulation of genes involved in adipocyte differentiation (PubMed:14701838). Plays a key role in the differentiation of lymphoid progenitors into B and T lineages (By similarity). Promotes differentiation towards the B lineage by inhibiting the T-cell instructive Notch signaling pathway through the specific transcriptional repression of Notch downstream target genes (By similarity). Also regulates osteoclast differentiation (By similarity). May also play a role, independently of its transcriptional activity, in double-strand break repair via classical nonhomologous end joining/cNHEJ (By similarity). Recruited to double-strand break sites on damage DNA, interacts with the DNA-dependent protein kinase complex and directly regulates its stability and activity in DNA repair (By similarity). May also modulate the splicing activity of KHDRBS1 toward BCL2L1 in a mechanism which is histone deacetylase-dependent and thereby negatively regulates the pro-apoptotic effect of KHDRBS1 (PubMed:24514149). {ECO:0000250|UniProtKB:088939, ECO:0000250|UniProtKB:Q9QZ48, ECO:0000269|PubMed:12004059, ECO:0000269|PubMed:14701838, ECO:0000269|PubMed:17595526, ECO:0000269|PubMed:20812024, ECO:0000269|PubMed:24514149, ECO:0000269|PubMed:25514493, ECO:0000269|PubMed:26455326, ECO:0000269|PubMed:26816381}.

## **Target Details**

Molecular Weight:	61.4 kDa
UniProt:	095365

# **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