

Datasheet for ABIN7556695 **TBX3 Protein (AA 1-741) (His tag)**



Overview

Quantity:	1 mg
Target:	TBX3
Protein Characteristics:	AA 1-741
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TBX3 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Tbx3 Protein expressed in mammalian cells.
Sequence:	MSLSMRDPVI PGTSMAYHPF LPHRAPDFAM SAVLGHQPPF FPALTLPPNG AAALSLPGAL
	AKPIMDQLVG AAETGIPFSS LGPQAHLRPL KTMEPEEDVE DDPKVHLEAK ELWDQFHKRG
	TEMVITKSGR RMFPPFKVRC SGLDKKAKYI LLMDIIAADD CRYKFHNSRW MVAGKADPEM
	PKRMYIHPDS PATGEQWMSK VVTFHKLKLT NNISDKHGFT LAFPSDHATW QGNYSFGTQT
	ILNSMHKYQP RFHIVRANDI LKLPYSTFRT YLFPETEFIA VTAYQNDKIT QLKIDNNPFA
	KGFRDTGNGR REKRKQLTLQ SMRVFEERHK KETSDESSSE QAAFNCFAQA SSPAVSIVGT
	SNLKDLCPSE AESDAEAESK EEHGPEACDA AKISTTTAEE PGRDKGSPAT RAQLFPAEPS
	RARDTARLDK ASPDSRHSPA TISSSTRVPG ADERRSPGRE GPVATKVDEA RAIPAKDAFA
	PLSVQTDATA HLAQGPLPGL GFAPGLAGQQ FFNGHPLFLH PGQFAMGGAF SSMAAGMGPL
	LATVSGASTG VSGLESTAMA SAAAAQGLSG ASAATLPFHL QQHVLASQGL AMSPFGSLFP
	YPYTYMAAAA AASTAAASSS VHRHPFLNLN SMRPRLRYSP YSIPVPVPDS SSLLATALPS
	MASAAGPLDG KAAALAASPA SVAVDSGSEL NSRSSTLSSG SVSLSPKLCS EKEAATSELQ

	SIQRLVSGLE AKPDRSCSGS P 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.
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:	TBX3
Alternative Name:	Tbx3 (TBX3 Products)
Background:	T-box transcription factor TBX3 (T-box protein 3),FUNCTION: Transcriptional repressor involved in developmental processes (By similarity). Binds to the palindromic T site 5'- TTCACACCTAGGTGTGAA-3' DNA sequence, or a half-site, which are present in the regulatory region of several genes (By similarity). Probably plays a role in limb pattern formation (By similarity). Required for mammary placode induction, and maintenance of the mammary buds during development (PubMed:16222716). Involved in branching morphogenesis in both developing lungs and adult mammary glands, via negative modulation of target genes, acting
	action of target and addit marrimary grands, via negative modulation of target genes, acting

redundantly with TBX2 (PubMed:27720610, PubMed:16222716). Required, together with TBX2,

to maintain cell proliferation in the embryonic lung mesenchyme, perhaps acting downstream of SHH, BMP and TGFbeta signaling (PubMed:27720610). Involved in modulating early inner ear development, acting independently of, and also redundantly with, TBX2 in different subregions of the developing ear (PubMed:33795231). Acts as a negative regulator of PML function in cellular senescence (By similarity). {ECO:0000250|UniProtKB:015119, ECO:0000269|PubMed:16222716, ECO:0000269|PubMed:27720610, ECO:0000269|PubMed:33795231}.

Molecular Weight: 79.2 kDa

UniProt: P70324

Pathways: Hormone Transport, Stem Cell Maintenance, Regulation of Muscle Cell Differentiation, Skeletal Muscle Fiber Development

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