Datasheet for ABIN7554914

PBX1 Protein (AA 1-430) (His tag)

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Overview

Quantity:	1 mg
Target:	PBX1
Protein Characteristics:	AA 1-430
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PBX1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat PBX1 Protein expressed in mammalien cells.
Sequence:	MDEQPRLMHS HAGVGMAGHP GLSQHLQDGA GGTEGEGGRK QDIGDILQQI MTITDQSLDE AQARKHALNC HRMKPALFNV LCEIKEKTVL SIRGAQEEEP TDPQLMRLDN MLLAEGVAGP EKGGGSAAAA AAAAASGGAG SDNSVEHSDY RAKLSQIRQI YHTELEKYEQ ACNEFTTHVM NLLREQSRTR PISPKEIERM VSIIHRKFSS IQMQLKQSTC EAVMILRSRF LDARRKRRNF NKQATEILNE YFYSHLSNPY PSEEAKEELA KKCGITVSQV SNWFGNKRIR YKKNIGKFQE EANIYAAKTA VTATNVSAHG SQANSPSTPN SAGSSSSFNM SNSGDLFMSV QSLNGDSYQG AQVGANVQSQ VDTLRHVISQ TGGYSDGLAA SQMYSPQGIS ANGGWQDATT PSSVTSPTEG PGSVHSDTSN **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:	PBX1
Alternative Name:	PBX1 (PBX1 Products)
Background:	Pre-B-cell leukemia transcription factor 1 (Homeobox protein PBX1) (Homeobox protein PRL),FUNCTION: Transcription factor which binds the DNA sequence 5'-TGATTGAT-3' as part of a heterodimer with HOX proteins such as HOXA1, HOXA5, HOXB7 and HOXB8 (PubMed:9191052). Binds to the DNA sequence 5'-TGATTGAC-3' in complex with a nuclear factor which is not a class I HOX protein (PubMed:9191052). Has also been shown to bind the DNA sequence 5'-ATCAATCAA-3' cooperatively with HOXA5, HOXB7, HOXB8, HOXC8 and HOXD4 (PubMed:8327485, PubMed:7791786). Acts as a transcriptional activator of PF4 in complex with MEIS1 (PubMed:12609849). Also activates transcription of SOX3 in complex with MEIS1 by binding to the 5'-TGATTGAC-3' consensus sequence (By similarity). In natural killer cells, binds to the NFIL3 promoter and acts as a transcriptional activator of NFIL3, promoting natural killer cell development (By similarity). Plays a role in the cAMP-dependent regulation of CYP17A1 gene expression via its cAMP-regulatory sequence (CRS1) (By similarity). Probably in complex with MEIS2, involved in transcriptional regulation by KLF4 (PubMed:21746878). Acts as a transcriptional activator of NKX2-5 and a transcriptional repressor of CDKN2B (By

Target Details

	similarity). Together with NKX2-5, required for spleen development through a mechanism that involves CDKN2B repression (By similarity). {ECO:0000250|UniProtKB:P41778, ECO:0000269|PubMed:12609849, ECO:0000269|PubMed:21746878, ECO:0000269|PubMed:7791786, ECO:0000269|PubMed:8327485, ECO:0000269|PubMed:9191052}., FUNCTION: [Isoform PBX1b]: As part of a PDX1:PBX1b:MEIS2B complex in pancreatic acinar cells, is involved in the transcriptional activation of the ELA1 enhancer, the complex binds to the enhancer B element and cooperates with the transcription factor 1 complex (PTF1) bound to the enhancer A element. {ECO:0000250|UniProtKB:P41778}.
Molecular Weight:	46.6 kDa
UniProt:	P40424

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.
Expiry Date:	12 months