Datasheet for ABIN7555307

RUNX1 Protein (AA 1-453) (His tag)

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Overview

Quantity:	1 mg
Target:	RUNX1
Protein Characteristics:	AA 1-453
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This RUNX1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant RUNX1 Protein expressed in mammalian cells.
Sequence:	MRIPVDASTS RRFTPPSTAL SPGKMSEALP LGAPDAGAAL AGKLRSGDRS MVEVLADHPG ELVRTDSPNF LCSVLPTHWR CNKTLPIAFK VVALGDVPDG TLVTVMAGND ENYSAELRNA TAAMKNQVAR FNDLRFVGRS GRGKSFTLTI TVFTNPPQVA TYHRAIKITV DGPREPRRHR QKLDDQTKPG SLSFSERLSE LEQLRRTAMR VSPHHPAPTP NPRASLNHST AFNPQPQSQM QDTRQIQPSP PWSYDQSYQY LGSIASPSVH PATPISPGRA SGMTTLSAEL SSRLSTAPDL TAFSDPRQFP ALPSISDPRM HYPGAFTYSP TPVTSGIGIG MSAMGSATRY HTYLPPPYPG SSQAQGGPFQ ASSPSYHLYY GASAGSYQFS MVGGERSPPR ILPPCTNAST GSALLNPSLP NQSDVVEAEG SHSNSPTNMA PSARLEEAVW RPY **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

Product Details

	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:	RUNX1
Alternative Name:	RUNX1 (RUNX1 Products)
Background:	Runt-related transcription factor 1 (Acute myeloid leukemia 1 protein) (Core-binding factor subunit alpha-2) (CBF-alpha-2) (Oncogene AML-1) (Polyomavirus enhancer-binding protein 2 alpha B subunit) (PEA2-alpha B) (PEBP2-alpha B) (SL3-3 enhancer factor 1 alpha B subunit) (SL3/AKV core-binding factor alpha B subunit),FUNCTION: Forms the heterodimeric complex core-binding factor (CBF) with CBFB. RUNX members modulate the transcription of their target genes through recognizing the core consensus binding sequence 5'-TGTGGT-3', or very rarely, 5'-TGCGGT-3', within their regulatory regions via their runt domain, while CBFB is a non-DNA-binding regulatory subunit that allosterically enhances the sequence-specific DNA-binding capacity of RUNX. The heterodimers bind to the core site of a number of enhancers and promoters, including murine leukemia virus, polyomavirus enhancer, T-cell receptor enhancers, LCK, IL3 and GM-CSF promoters (Probable). Essential for the development of normal hematopoiesis (PubMed:17431401). Acts synergistically with ELF4 to transactivate the IL-3

Target Details

	promoter and with ELF2 to transactivate the BLK promoter (PubMed:10207087, PubMed:14970218). Inhibits KAT6B-dependent transcriptional activation (By similarity). Involved in lineage commitment of immature T cell precursors. CBF complexes repress ZBTB7B transcription factor during cytotoxic (CD8+) T cell development. They bind to RUNX-binding sequence within the ZBTB7B locus acting as transcriptional silencer and allowing for cytotoxic T cell differentiation. CBF complexes binding to the transcriptional silencer is essential for recruitment of nuclear protein complexes that catalyze epigenetic modifications to establish epigenetic ZBTB7B silencing (By similarity). Controls the anergy and suppressive function of regulatory T-cells (Treg) by associating with FOXP3. Activates the expression of IL2 and IFNG and down-regulates the expression of TNFRSF18, IL2RA and CTLA4, in conventional T-cells (PubMed:17377532). Positively regulates the expression of RORC in T-helper 17 cells (By similarity). {ECO:0000250|UniProtKB:Q03347, ECO:0000269|PubMed:10207087, ECO:0000269|PubMed:11965546, ECO:0000269|PubMed:14970218, ECO:0000269|PubMed:17377532, ECO:0000269|PubMed:17431401, ECO:0000305}., FUNCTION: Isoform AML-1G shows higher binding activities for target genes and binds TCR-beta-E2 and RAG-1 target site with threefold higher affinity than other isoforms. It is less effective in the context of neutrophil terminal differentiation. {ECO:0000250|UniProtKB:Q03347}., FUNCTION: Isoform AML-1L interferes with the transactivation activity of RUNX1. {ECO:0000269|PubMed:9199349}.
Molecular Weight:	48.7 kDa
UniProt:	Q01196

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

Handling

Storage Comment:	Store at -80°C.
Expiry Date:	12 months