abcam

Product datasheet

Recombinant Human RUNX1 / AML1 protein ab134873

Description

Product name	Recombinant Human RUNX1 / AML1 protein
Purity	> 90 % SDS-PAGE. ab134873 was expressed in E. coli as inclusion bodies, refolded using unique temperature shift inclusion body refolding technology, chromatographically purified and sterile-filtered.
Expression system	Escherichia coli
Accession	Q01196-3
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	29aa_Tag_RIPVDASTSRRFTPPSTALSPGKMSEALPLGA PDAGAALAG KLRSGDRSMVEVLADHPGELVRTDSPNFLCSVLPTHWR CNKTLPIAFKVV ALGDVPDGTLVTVMAGNDENYSAELRNATAAMKNQVARF NDLRFVGRSGR GKSFTLTITVFTNPPQVATYHRAIKITVDGPREPRRHRQKLD DQTKPGSL SFSERLSELEQLRRTAMRVSPHHPAPTPNPRASLNHSTA FNPQPQSQMQE EDTAPWRCLEESGGGGSPGRRRRRRRRRRR
Predicted molecular weight	33 kDa including tags
Amino acids	2 to 250

Specifications

Our **Abpromise guarantee** covers the use of **ab134873** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies SDS-PAGE
Form	Liquid

Preparation and Storage

Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at -20ºC. pH: 8.00 Constituent: 0.32% Tris HCl Contains NaCl,EDTA,KCl,arginine,DTT and Glycerol

General Info

Function	CBF binds to the core site, 5'-PYGPYGGT-3', of a number of enhancers and promoters, including murine leukemia virus, polyomavirus enhancer, T-cell receptor enhancers, LCK, IL-3 and GM-CSF promoters. The alpha subunit binds DNA and appears to have a role in the development of normal hematopoiesis. Isoform AML-1L interferes with the transactivation activity of RUNX1. Acts synergistically with ELF4 to transactivate the IL-3 promoter and with ELF2 to transactivate the mouse BLK promoter. Inhibits MYST4-dependent transcriptional activation.
Tissue specificity	Expressed in all tissues examined except brain and heart. Highest levels in thymus, bone marrow and peripheral blood.
Involvement in disease	Note=A chromosomal aberration involving RUNX1/AML1 is a cause of M2 type acute myeloid leukemia (AML-M2). Translocation t(8;21)(q22;q22) with RUNX1T1. Note=A chromosomal aberration involving RUNX1/AML1 is a cause of therapy-related myelodysplastic syndrome (T-MDS). Translocation t(3;21)(q26;q22) with EAP or MECOM. Note=A chromosomal aberration involving RUNX1/AML1 is a cause of chronic myelogenous leukemia (CML). Translocation t(3;21)(q26;q22) with EAP or MECOM. Note=A chromosomal aberration involving RUNX1/AML1 is found in childhood acute lymphoblastic leukemia (ALL). Translocation t(12;21)(p13;q22) with TEL. The translocation fuses the 3'-end of TEL to the alternate 5'-exon of AML-1H. Note=A chromosomal aberration involving RUNX1 is found in acute leukemia. Translocation t(11,21)(q13;q22) that forms a MACROD1-RUNX1 fusion protein. Defects in RUNX1 are the cause of familial platelet disorder with associated myeloid malignancy (FPDMM) [MIM:601399]. FPDMM is an autosomal dominant disease characterized by qualitative and quantitative platelet defects, and propensity to develop acute myelogenous leukemia. Note=A chromosomal aberration involving RUNX1/AML1 is found in therapy-related myeloid malignancies. Translocation t(16;21)(q24;q22) that forms a RUNX1-CBFA2T3 fusion protein. Note=A chromosomal aberration involving RUNX1/AML1 is a cause of chronic myelomonocytic leukemia. Inversion inv(21)(q21;q22) with USP16.
Sequence similarities	Contains 1 Runt domain.
Domain	A proline/serine/threonine rich region at the C-terminus is necessary for transcriptional activation of target genes.
Post-translational modifications	Phosphorylated in its C-terminus upon IL-6 treatment. Phosphorylation enhances interaction with MYST3. Methylated.
Cellular localization	Nucleus.

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors