


Product datasheet

Anti-RUNX1 / AML1 antibody ab23980

★★★★☆ 14 Abreviews 126 References 2 Images

Overview

Product name	Anti-RUNX1 / AML1 antibody
Description	Rabbit polyclonal to RUNX1 / AML1
Host species	Rabbit
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Human Predicted to work with: Rat 
Immunogen	Synthetic peptide corresponding to Human RUNX1/ AML1 aa 200-300 conjugated to keyhole limpet haemocyanin. (Peptide available as ab24287)
General notes	<p>Antibody batches of a concentration <1mg/ml will have BSA added to them.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab23980 in the following tested applications.

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

Application	Abreviews	Notes
WB	★★★★☆ (6)	Use a concentration of 1 µg/ml. Detects a band of approximately 52 kDa (predicted molecular weight: 48 kDa).

Target

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

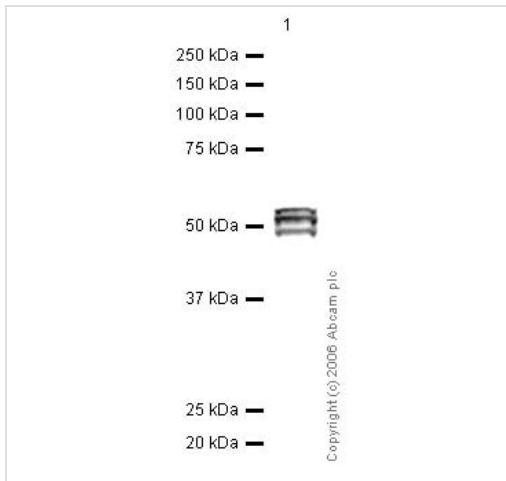
Phosphorylated in its C-terminus upon IL-6 treatment. Phosphorylation enhances interaction with MYST3.

Methylated.

Cellular localization

Nucleus.

Images



Western blot - Anti-RUNX1 / AML1 antibody (ab23980)

Anti-RUNX1 / AML1 antibody (ab23980) at 1 µg/ml + Jurkat nuclear extract lysate (ab14844) at 20 µg

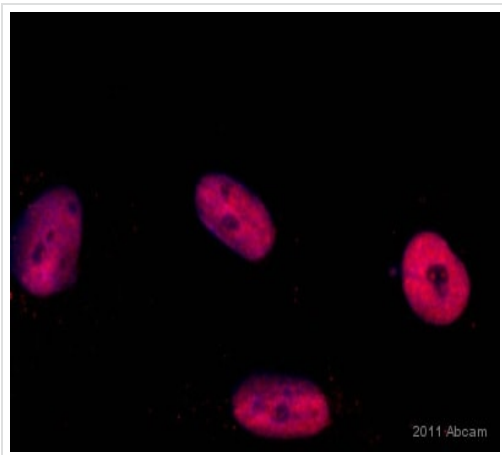
Secondary

Rabbit IgG secondary antibody (ab28446) at 1/10000 dilution

Predicted band size: 48 kDa

Observed band size: 48,52,55 kDa

This antibody recognized three distinct bands of between 48 and 55 kDa in Jurkat nuclear lysate. These may represent distinct isoforms of Runx1 or may represent post-translationally modified forms.



Immunocytochemistry/ Immunofluorescence - Anti-RUNX1 / AML1 antibody (ab23980)

Image courtesy of an anonymous Abreview.

ab23980 staining RUNX1 / AML1 in human glioblastoma cells by Immunocytochemistry/ Immunofluorescence. The cells were fixed in paraformaldehyde, permeabilised in 0.1% Triton X-100 and then blocked using 0.5% BSA for 20 minutes. Samples were then incubated with primary antibody at 1/50 for 16 hours at 4°C. The secondary antibody used was a goat anti-rabbit IgG conjugated to Cy3® used at a 1/400 dilution.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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