# abcam

### Product datasheet

# Anti-RUNX1 / AML1 antibody ab23980

★★★★★ 14 Abreviews 149 References 1 Image

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** Antibody batches of a concentration <1 mg/ml will have BSA added to them.

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.

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

**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

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# **Applications**

### The Abpromise guarantee

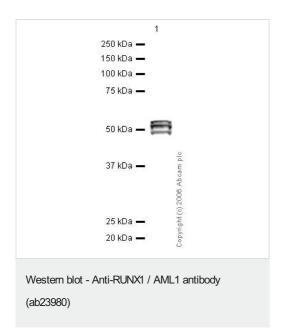
Our <u>Abpromise guarantee</u> covers the use of ab23980 in the following tested applications.

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**



Anti-RUNX1 / AML1 antibody (ab23980) at 1  $\mu$ g/ml + Jurkat nuclear extract lysate (ab14844) at 20  $\mu$ g

#### 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.

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

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