


Product datasheet

Anti-RUNX1 / AML1 antibody ab229482

★★★★☆ [3 Abreviews](#) [4 Images](#)

Overview

Product name	Anti-RUNX1 / AML1 antibody
Description	Rabbit polyclonal to RUNX1 / AML1
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human Predicted to work with: Cow, Pig, Rhesus monkey 
Immunogen	Recombinant fragment within Human RUNX1/ AML1 (internal sequence). The exact sequence is proprietary. Database link: Q01196
Positive control	WB: RAW 264.7, C2C12, Rat2 and Jurkat whole cell extracts; Jurkat nuclear extract. ICC/IF: SK-N-SH cells.
General notes	<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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.00 Preservative: 0.025% Proclin 300 Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)
Purity	Immunogen affinity purified
Clonality	Polyclonal

Applications

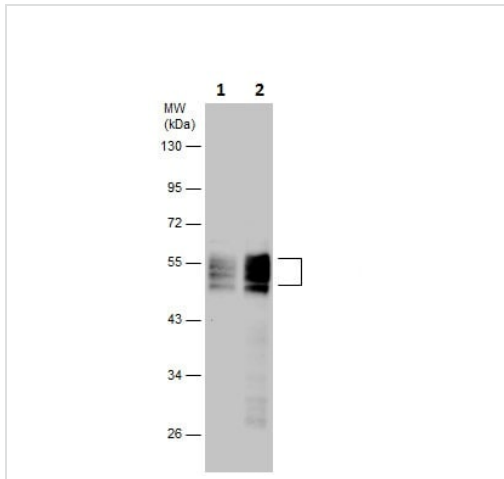
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab229482 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★☆ (2)	1/500 - 1/3000. Predicted molecular weight: 48 kDa.
ICC/IF	★☆☆☆☆ (1)	1/100 - 1/1000.

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	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>Note=A chromosomal aberration involving RUNX1 is found in acute leukemia. Translocation t(11,21)(q13;q22) that forms a MACROD1-RUNX1 fusion protein.</p> <p>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.</p> <p>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.</p> <p>Note=A chromosomal aberration involving RUNX1/AML1 is a cause of chronic myelomonocytic leukemia. Inversion inv(21)(q21;q22) with USP16.</p>
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 (ab229482)

All lanes : Anti-RUNX1 / AML1 antibody (ab229482) at 1/1000 dilution

Lane 1 : Jurkat (human T cell leukemia cell line from peripheral blood) whole cell extract

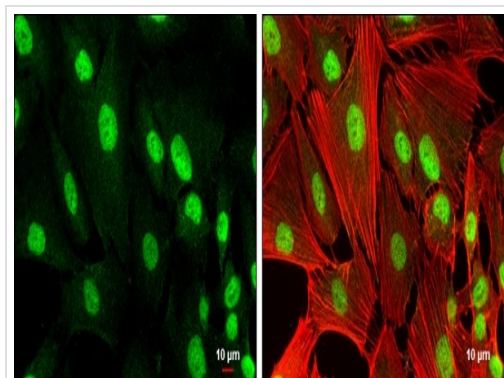
Lane 2 : Jurkat nuclear extract

Lysates/proteins at 30 µg per lane.

Developed using the ECL technique.

Predicted band size: 48 kDa

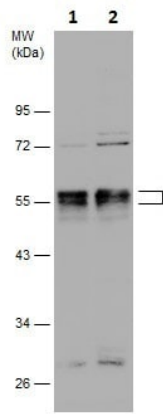
10% SDS-PAGE



Immunocytochemistry/ Immunofluorescence - Anti-RUNX1 / AML1 antibody (ab229482)

SK-N-SH (human neuroblastoma cell line) cells stained for RUNX1 / AML1 (green) using ab229482 at 1/400 dilution in ICC/IF. Cells were fixed in 4% paraformaldehyde at RT for 15 minutes.

Nuclear counterstain: Hoechst 33342 (blue). The cytoskeleton is stained with Phalloidin (red).



Western blot - Anti-RUNX1 / AML1 antibody
(ab229482)

All lanes : Anti-RUNX1 / AML1 antibody (ab229482) at 1/1000 dilution

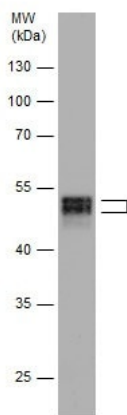
Lane 1 : RAW 264.7 (mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell extract

Lane 2 : C2C12 (mouse myoblast cell line) whole cell extract

Lysates/proteins at 30 µg per lane.

Developed using the ECL technique.

Predicted band size: 48 kDa



Western blot - Anti-RUNX1 / AML1 antibody
(ab229482)

Anti-RUNX1 / AML1 antibody (ab229482) at 1/1000 dilution + Rat2 (rat fibroblast cell line) whole cell extract at 30 µg

Developed using the ECL technique.

Predicted band size: 48 kDa

10% SDS-PAGE

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