abcam

Product datasheet

Anti-Ctip1/BCL-11A antibody [14B5] ab19487

KO VALIDATED

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Overview

Product name	Anti-Ctip1/BCL-11A antibody [14B5]
Description	Mouse monoclonal [14B5] to Ctip1/BCL-11A
Host species	Mouse
Specificity	Some optimisation may be required for detection of the target protein due to low levels of endogenous expression in some samples. Please see images below for suitable positive controls.
Tested applications	**Suitable for:** WB, Flow Cyt
Species reactivity	**Reacts with:** Mouse, Human
Immunogen	Fusion protein corresponding to Ctip1/BCL-11A. Database link: **Q9H165**
Epitope	Epitope is in core of CTIP1/Bcl11a (aa's 172-434).
Positive control	WB: Raji whole cell lysate, Jurkat cell line, MEF cell line and HEK293T cell line. Flow Cyt: Ramos cells.
General notes	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.
Storage buffer	pH: 7.50 Preservative: 0.02% Sodium azide Constituent: HEPES
Purity	Multi-step Chromatography

Clonality	Monoclonal
Clone number	14B5
Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab19487 in the following tested applications.

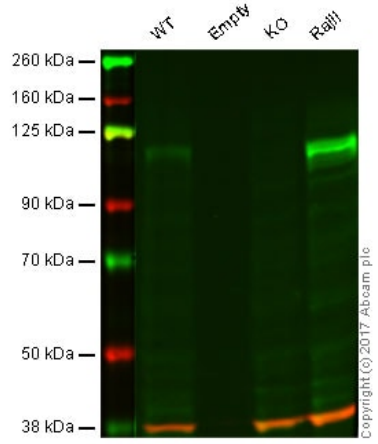
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000. Detects a band of approximately 120 kDa (predicted molecular weight: 91 kDa).
Flow Cyt		Use 0.1µg for 10^6 cells. **ab170190** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

Function	Functions as a myeloid and B-cell proto-oncogene. May play important roles in leukemogenesis and hematopoiesis. An essential factor in lymphopoiesis, is required for B-cell formation in fetal liver. May function as a modulator of the transcriptional repression activity of ARP1.
Tissue specificity	Expressed at high levels in brain, spleen thymus, bone marrow and testis. Expressed in CD34-positive myeloid precursor cells, B-cells, monocytes and megakaryocytes. Expression is tightly regulated during B-cell development.
Involvement in disease	Note=Chromosomal aberrations involving BCL11A may be a cause of lymphoid malignancies. Translocation t(2;14)(p13;q32.3) causes BCL11A deregulation and amplification.
Sequence similarities	Contains 6 C2H2-type zinc fingers.
Post-translational modifications	Sumoylated by SUMO1.
Cellular localization	Cytoplasm. Nucleus. Associates with the nuclear body. Colocalizes with SUMO1 and SENP2 in nuclear speckles.

Images

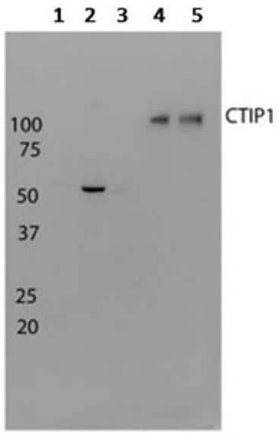


Western blot - Anti-Ctip1/BCL-11A antibody [14B5] (ab19487)

Lane 1: Wild-type HAP1 whole cell lysate (20 µg)
Lane 2: Empty (0 µg)
Lane 3: BCL11A (Ctip1) knockout HAP1 whole cell lysate (20 µg)
Lane 4: Raji whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab19487 observed at 91 kDa. Red - loading control, **ab181602**, observed at 37 kDa.

ab19487 was shown to specifically react with BCL11A (Ctip1) in HAP1 wild type cells. No band was observed when BCL11A (Ctip1) knockout cells were examined. Wild-type and BCL11A (Ctip1) knockout samples were subjected to SDS-PAGE. ab19487 and **ab181602** (Rabbit anti GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/10,000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed (**ab216772**) and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed (**ab216777**) secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Ctip1/BCL-11A antibody [14B5] (ab19487)

All lanes : Anti-Ctip1/BCL-11A antibody [14B5] (ab19487)

Lane 1 : C6 Cell Line
Lane 2 : MEF Cell Line
Lane 3 : HDFn Cell LIne
Lane 4 : Jurkat Cell Line
Lane 5 : HEK293T Cell Line

Lysates/proteins at 20 µg per lane.

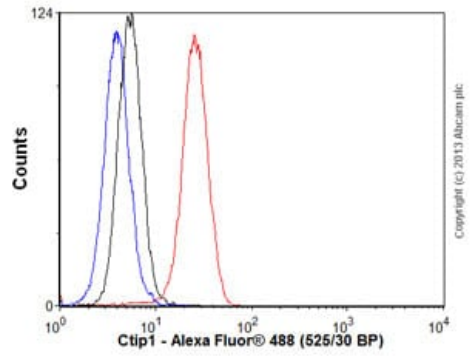
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 91 kDa

The CTIP1 / BCL-11A protein band is indicated at 92 kDa. This antibody also identified a 55 kDa protein band in Western blotting, principally in mouse fibroblasts (MEF), but this is unrelated to.

Blocking was performed in 5% milk (in PBS). The primary antibody was diluted in 1% milk (in PBS) and incubated overnight at 4ºC.



Flow Cytometry - Anti-Ctip1/BCL-11A antibody [14B5] (ab19487)

Overlay histogram showing Ramos cells stained with ab19487 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab19487, 0.1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse IgG (H+L) (**ab150113**) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (**ab91353**, 1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in Ramos cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

Western blot - Anti-Ctip1/BCL-11A antibody [14B5] (ab19487)

Anti-Ctip1/BCL-11A antibody [14B5] (ab19487) at 1 µg/ml + Raji (Human Burkitt's lymphoma cell line) Whole Cell Lysate at 10 µg

Secondary
Goat Anti-Mouse IgG H&L (HRP) preadsorbed (**ab97040**) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 91 kDa
Observed band size: 120 kDa
Additional bands at: 37 kDa, 42 kDa, 62 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 20 minutes

The 120 kDa band observed is comparable to the molecular weight

seen with other commercially available antibodies to Ctip1 / BCL-11A.

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

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