abcam

ab19487

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

Anti-Ctip1/BCL-11A antibody [14B5] (ab19487) is a mouse monoclonal antibody detecting Ctip1/BCL-11A in **Western Blot, Flow Cytometry**. Suitable for **Human, Mouse**.

- KO validated for confirmed specificity
- Over 40 publications
- Trusted since 2005

KO Validated

## Key facts

| | |
|---|---|
| **Isotype** | IgG1 |
| **Host species** | Mouse |
| **Storage buffer** | pH: 7.5 Preservative: 0.02% Sodium azide Constituents: HEPES |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | Recombinant Protein within Human BCL11A. The exact immunogen used to generate this antibody is proprietary information. Database link Q9H165 |
| **Clone number** | 14B5 |
| **Purification technique** | Multi-step chromatography |
| **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. |
| **Epitope** | Epitope is in core of CTIP1/Bcl11a (aa's 172-434). |
| **Light chain type** | kappa |
| **Concentration** | 1 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

## Flow Cyt

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 0.1 µg for $10^6$ Cells |
| **Notes** | ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody. |

### Expected

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | Use at an assay dependent concentration. |
| **Notes** | - |

## WB

### Tested

| | |
|---|---|
| **Species** | Mouse |
| **Dilution info** | 1/1000 |
| **Notes** | - |

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/1000 |
| **Notes** | - |

## Target data

See full target information BCL11A

| | |
|---|---|
| **Function** | Transcription factor (PubMed:16704730, PubMed:29606353). Associated with the BAF SWI/SNF chromatin remodeling complex (PubMed:23644491, PubMed:39607926). Binds to the 5'-TGACCA-3' sequence motif in regulatory regions of target genes, including a distal promoter of the HBG1 hemoglobin |

subunit gamma-1 gene (PubMed:29606353, PubMed:39423807). Involved in regulation of the developmental switch from gamma- to beta-globin, probably via direct repression of HBG1; hence indirectly repressing fetal hemoglobin (HbF) level (PubMed:26375765, PubMed:29606353, PubMed:39423807, PubMed:39607926). Involved in brain development (PubMed:27453576). May play a role in hematopoiesis (By similarity). Essential factor in lymphopoiesis required for B-cell formation in fetal liver (By similarity). May function as a modulator of the transcriptional repression activity of NR2F2 (By similarity).

## Storage

| | |
|---|---|
| **Shipped at conditions** | Blue Ice |
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | +4°C |

## Notes

**What is this antibody validated in?**
Anti-Ctip1/BCL-11A antibody [14B5] (ab19487) is a mouse monoclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Flow Cyt) in Human, Mouse samples.

**What is the molecular weight of Ctip1/BCL-11A?**
Anti-Ctip1/BCL-11A [14B5] (ab19487) specifically detects a band for Ctip1/BCL-11A (UniProt: Q9H165) at a molecular weight of 91kDa.

**Trusted by the scientific community**
Anti-Ctip1/BCL-11A [14B5] (ab19487) was first used in a scientific publication in 2005 and has been cited over 40 times in peer-reviewed journals.

**Specificity confirmed**
The specificity of Anti-Ctip1/BCL-11A antibody [14B5] (ab19487) has been confirmed by Western blot testing in BCL11A Knockout HAP1 cells.

## Product promise

**Tested**

We have tested this species and application combination and it works. It is covered by our product promise.

**Expected**

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

**Predicted**

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

**Not recommended**

We do not recommend this combination. It is not covered by our product promise.

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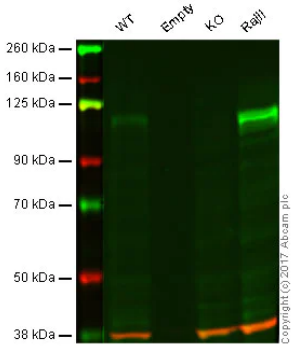
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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## 4 product images




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

Ctip1/BCL-11A Western blot staining using mouse Anti-Ctip1/BCL-11A antibody

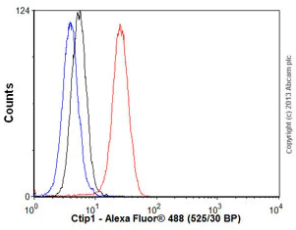
**Lane 1:** Wild-type HAP1 whole cell lysate (20 µg)
**Lane 2:** Empty (0 µg)
**Lane 3:** BCL11A (Ctip1) knockout HAP1 whole cell lysate (20 µg)
**Lane 4:** Raji whole cell lysate (20 µg)
**Lanes 1 - 4:** Merged signal (red and green). Green - ab19487 observed at 91 kDa. Red - loading control, ab181602, 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.

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

Predicted band size: 91 kDa

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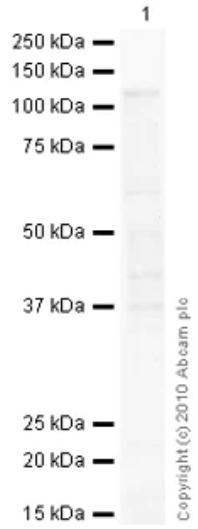



### Flow Cytometry - Anti-Ctip1/BCL-11A antibody [14B5] (ab19487)

Ctip1/BCL-11A Flow Cytometry staining using mouse Anti-Ctip1/BCL-11A antibody

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/1x$10^6$ 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)

Ctip1/BCL-11A Western blot staining of Raji (Human Burkitt's lymphoma cell line) Whole Cell Lysate using mouse Anti-Ctip1/BCL-11A antibody

The 120 kDa band observed is comparable to the molecular weight seen with other commercially available antibodies to Ctip1 / BCL-11A.
All lanes:
Western blot - Anti-Ctip1/BCL-11A antibody [14B5] (ab19487) at 1 µg/mL

All lanes:
Raji (Human Burkitt's lymphoma cell line) Whole Cell Lysate at 10 µg

Secondary

All lanes:
Western blot - 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, 37 kDa, 42 kDa, 62 kDa

Exposure time: 20min

**a**

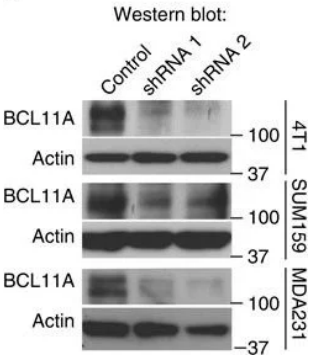



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## Western blot - Anti-Ctip1/BCL-11A antibody [14B5] (ab19487)

Ctip1/BCL-11A Western blot staining using mouse Anti-Ctip1/BCL-11A antibody

Western Blotting using Anti-Ctip1/BCL-11A antibody [14B5], ab19487. Publication image from Caldas, C. et al., 2015, Nat Commun, 25574598. Legend direct from paper.

BCL11A knockdown in TNBC cells reduces tumour development.(a) Western blot showing BCL11A knockdown efficiency in 4T1, SUM159 and MDA231 cells transfected with control (scramble), shRNA1 or shRNA2 vectors. (b) MTS cell viability assay (see Methods) shows that BCL11A knockdown does not affect cell viability in culture. (c) EdU cell cycle analysis showing that Bcl11a knockdown does not affect cell cycle kinetics in all tested cell lines. Data are presented as mean±s.d. (n=3). (d–f) Comparison of colony numbers from control, shRNA1 and shRNA2 in 4T1, SUM159 and MDA231 cells. Data are presented as mean±s.d. (n=3). P value indicates student’ s t-test. (g–i) Graph depicting the reduction in tumour size observed when shRNA1 or shRNA 2 transfected 4T1, SUM159 or MDA231 cells are injected subcutaneously into mice compared with control. Image under graph shows the actual tumours measured (scale bar, 5 mm). Unpaired T-test was performed on d–i and * indicates P<0.05 and ** indicates P<0.005.

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