

## Product datasheet

# Anti-TIP49A antibody [2943C1 $\alpha$ ] ab51500

★★★★★ [3 Abreviews](#) [12 References](#) [5 Images](#)

### Overview

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<b>Product name</b>	Anti-TIP49A antibody [2943C1a]
<b>Description</b>	Mouse monoclonal [2943C1a] to TIP49A
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt, ICC/IF, WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	Recombinant fragment, internal sequence. (Human)
<b>Positive control</b>	HT-1080 whole cell lysate, HeLa cells.
<b>General notes</b>	<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&amp;As</p>

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.05% Sodium azide Constituents: 1% BSA, 0.1312% Sodium phosphate, 1.05% Potassium chloride, PBS
<b>Purity</b>	Protein G purified
<b>Purification notes</b>	ab51500 purified using protein G column chromatography from culture supernatant of hybridoma cultured in a medium containing bovine IgG-depleted (approximately 95%) fetal bovine serum.
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	2943C1a
<b>Isotype</b>	IgG2b

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab51500 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
Flow Cyt		Use a concentration of 0.5 µg/ml. <b>ab170192</b> - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.
ICC/IF		Use at an assay dependent concentration.
WB	★★★★★ (3)	1/100. Detects a band of approximately 50 kDa (predicted molecular weight: 50 kDa).
IHC-P		Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

## Target

### Function

Possesses single-stranded DNA-stimulated ATPase and ATP-dependent DNA helicase (3' to 5') activity. Component of the NuA4 histone acetyltransferase complex which is involved in transcriptional activation of select genes principally by acetylation of nucleosomal histones H4 and H2A. This modification may both alter nucleosome - DNA interactions and promote interaction of the modified histones with other proteins which positively regulate transcription. This complex may be required for the activation of transcriptional programs associated with oncogene and proto-oncogene mediated growth induction, tumor suppressor mediated growth arrest and replicative senescence, apoptosis, and DNA repair. The NuA4 complex ATPase and helicase activities seem to be, at least in part, contributed by the association of RUVBL1 and RUVBL2 with EP400. NuA4 may also play a direct role in DNA repair when recruited to sites of DNA damage. RUVBL1 plays an essential role in oncogenic transformation by MYC and also modulates transcriptional activation by the LEF1/TCF1-CTNNB1 complex.  
May be able to bind plasminogen at cell surface and enhance plasminogen activation.  
Essential for cell proliferation.

### Tissue specificity

Ubiquitously expressed with high expression in heart, skeletal muscle and testis.

### Sequence similarities

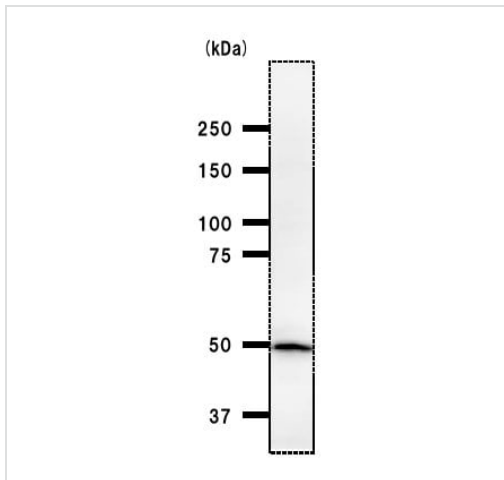
Belongs to the ruvB family.

### Domain

Binding to MYC is dependent on a Myc domain essential for oncogenic activity.

### Cellular localization

Nucleus matrix. Nucleus > nucleoplasm. Cytoplasm. Membrane. Cytoplasm > cytoskeleton > centrosome. Mainly localized in the nucleus, associated with nuclear matrix or in the nuclear cytosol, although it is also present in the cytoplasm and associated with the cell membranes. In prophase and prometaphase it is located at the centrosome and the branching microtubule spindles. After mitotic nuclear membrane disintegration it accumulates at the centrosome and sites of tubulin polymerization. As cells pass through metaphase and into telophase it is located close to the centrosome at the early phase of tubulin polymerization. In anaphase it accumulates at the zone of tubule interdigitation. In telophase it is found at polar tubule overlap, and it reappears at the site of chromosomal decondensation in the daughter cells.



Western blot - Anti-TIP49A antibody [2943C1a] (ab51500)

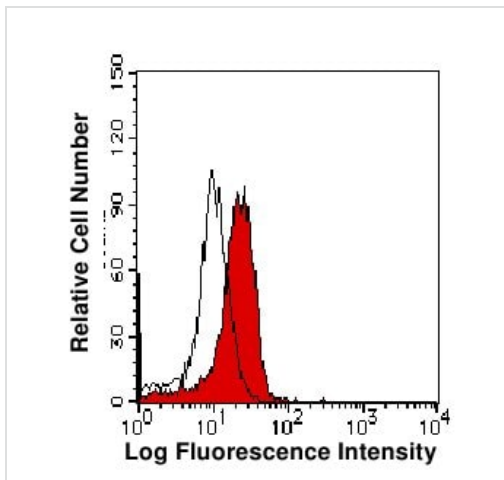
Anti-TIP49A antibody [2943C1a] (ab51500) at 1/100 dilution + HT-1080 whole cell lysate at 50  $\mu$ g

**Secondary**

Anti Mouse IgG at 1/2500 dilution

**Predicted band size:** 50 kDa

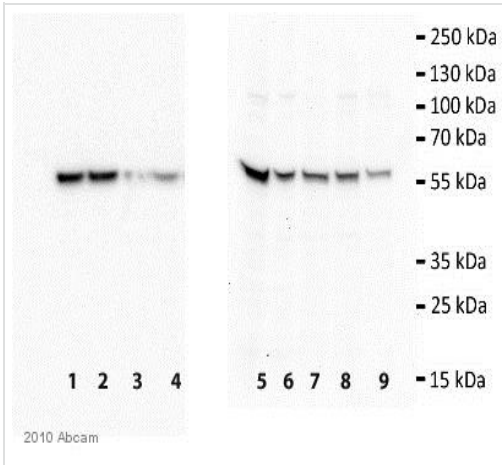
**Observed band size:** 50 kDa



Flow Cytometry - Anti-TIP49A antibody [2943C1a] (ab51500)

Flow cytometry using ab51500 at 0.5ug using HeLa cells.

Secondary used was an AlexaFluor® 488 conjugated Goat Anti-mouse IgG (0.25  $\mu$ g). White peak shows an isotype control, while the red peak shows ab51500.



Western blot - Anti-TIP49A antibody [2943C1a] (ab51500)

This image is courtesy of an anonymous Abreview

**All lanes** : Anti-TIP49A antibody [2943C1a] (ab51500) at 1 µg/ml (in 3% BSA + PBS-Tween 0.1% for 12 hours at 4°C)

**Lanes 1-2** : HeLa cell lysate + control siRNA sequence

**Lane 3** : HeLa cell lysate suppressed by siRNA (1) sequence to pontin

**Lane 4** : HeLa cell lysate suppressed by siRNA (2) sequence to pontin

**Lane 5** : Cell lysate of 293T cells

**Lane 6** : Cell lysate of HeLa cells

**Lane 7** : Cell lysate of U251 cells

**Lane 8** : Cell lysate of Jurkat cells

**Lane 9** : Cell lysate of U2OS cells

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes** : An HRP-conjugated Goat anti-mouse IgG polyclonal at 1/5000 dilution

Developed using the ECL technique.

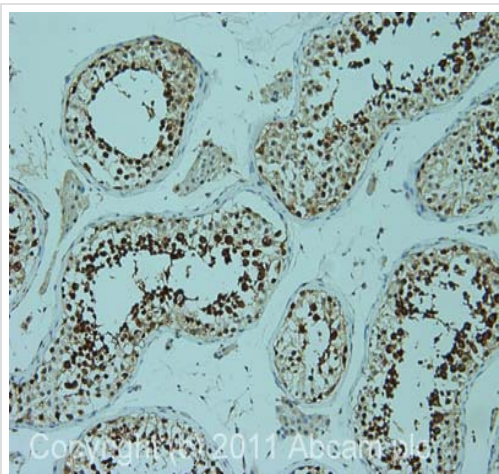
Performed under reducing conditions.

**Predicted band size:** 50 kDa

**Observed band size:** 57 kDa

**Exposure time:** 2 minutes

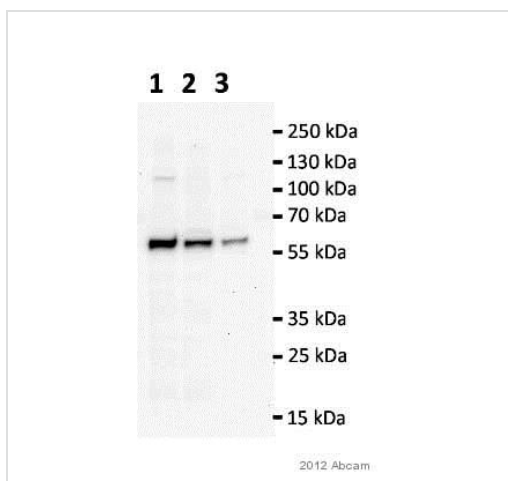
**Blocking Step:** 3% BSA for 1 hour at 21°C



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TIP49A antibody [2943C1a] (ab51500)

IHC image of ab51500 staining in human normal testis formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab51500, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Western blot - Anti-TIP49A antibody [2943C1a] (ab51500)

Image courtesy of an anonymous Abreview.

**All lanes :** Anti-TIP49A antibody [2943C1a] (ab51500) at 1/100 dilution

**Lane 1 :** Whole cell lysate prepared from 9L cells

**Lane 2 :** Whole cell lysate prepared from PC-12 (Rat adrenal gland pheochromocytoma) cells

**Lane 3 :** Whole cell lysate prepared from RIE-1 cells

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes :** HRP conjugated goat anti-mouse polyclonal at 1/5000 dilution

Developed using the ECL technique.

**Predicted band size:** 50 kDa

**Observed band size:** 57 kDa

**Exposure time:** 4 minutes

Excellent antibody. Detects a single species of the predicted mobility in a range of common rat cell lines.

## **Our Abpromise to you: Quality guaranteed and expert technical support**

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