


Anti-TRIM33 antibody ab47062

[4 References](#) [5 Images](#)

Overview

Product name	Anti-TRIM33 antibody
Description	Rabbit polyclonal to TRIM33
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Macaque monkey 
Immunogen	Synthetic peptide corresponding to Human TRIM33 aa 600-700 conjugated to keyhole limpet haemocyanin. (Peptide available as ab47108 , ab47109)
Positive control	ab47062 gave a positive signal in the following whole cell lysates: MEF1 (data not shown); MEL-1 (data not shown); Mouse Embryonic Germ cell (data not shown). ICC/IF: mouse embryonic stem cells and MCF7 cells. WB: MCF7, A431, E14tG2a, SW480, HeLa, HEK293, SHSY-5Y and K562 whole cell lysate, Mouse embryonic stem cell lysate and F9 whole cell lysate (ab27193).
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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab47062 in the following tested applications.

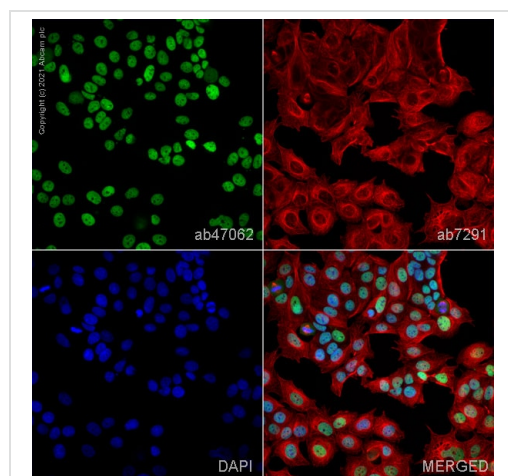
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 150 kDa (predicted molecular weight: 122 kDa).
ICC/IF		Use a concentration of 1 µg/ml.

Target

Function	Acts as an E3 ubiquitin-protein ligase. Promotes SMAD4 ubiquitination, nuclear exclusion and degradation via the ubiquitin proteasome pathway. According to PubMed:16751102, does not promote a decrease in the level of endogenous SMAD4. May act as a transcriptional repressor. Inhibits the transcriptional response to TGF-beta/BMP signaling cascade. Plays a role in the control of cell proliferation. Its association with SMAD2 and SMAD3 stimulates erythroid differentiation of hematopoietic stem/progenitor (By similarity). Monoubiquitinates SMAD4 and acts as an inhibitor of SMAD4-dependent TGF-beta/BMP signaling cascade (Monoubiquitination of SMAD4 hampers its ability to form a stable complex with activated SMAD2/3 resulting in inhibition of TGF-beta/BMP signaling cascade).
Tissue specificity	Expressed in stem cells at the bottom of the crypts of the colon (at protein level). Expressed in colon adenomas and adenocarcinomas (at protein level). Expressed in brain, lung, liver, spleen, thymus, prostate, kidney, testis, heart, placenta, pancreas, small intestine, ovary, colon, skeletal muscle and hematopoietic progenitors.
Pathway	Protein modification; protein ubiquitination.
Involvement in disease	Defects in TRIM33 are a cause of thyroid papillary carcinoma (TPC) [MIM:188550]. TPC is a common tumor of the thyroid that typically arises as an irregular, solid or cystic mass from otherwise normal thyroid tissue. Papillary carcinomas are malignant neoplasm characterized by the formation of numerous, irregular, finger-like projections of fibrous stroma that is covered with a surface layer of neoplastic epithelial cells. Note=A chromosomal aberration involving TRIM33 is found in thyroid papillary carcinomas. Translocation t(1;10)(p13;q11) with RET. The translocation generates the TRIM33/RET (PTC7) oncogene.
Sequence similarities	Belongs to the TRIM/RBCC family. Contains 2 B box-type zinc fingers. Contains 1 bromo domain. Contains 1 PHD-type zinc finger. Contains 1 RING-type zinc finger.
Cellular localization	Nucleus. In discrete nuclear dots resembling nuclear bodies.

Images

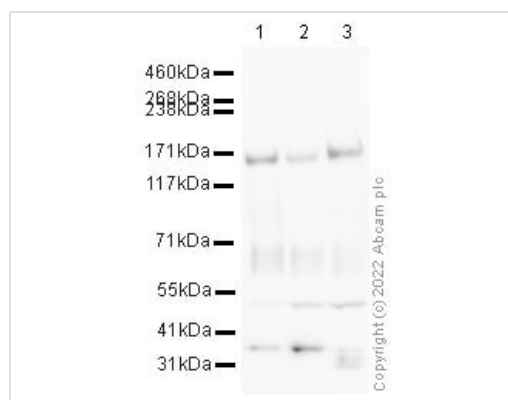


Immunocytochemistry/ Immunofluorescence - Anti-TRIM33 antibody (ab47062)

ab47062 staining TRIM33 in MCF7 cells. The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab47062 at 1µg/ml and **ab7291**, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with **ab150081**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and **ab150120**, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Also suitable in cells fixed with 100% methanol (5 min).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



Western blot - Anti-TRIM33 antibody (ab47062)

All lanes : Anti-TRIM33 antibody (ab47062) at 1 µg/ml

Lane 1 : MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

Lane 2 : A431 (Human epidermoid carcinoma cell line) whole cell lysate

Lane 3 : Mouse embryonic stem cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/50000 dilution

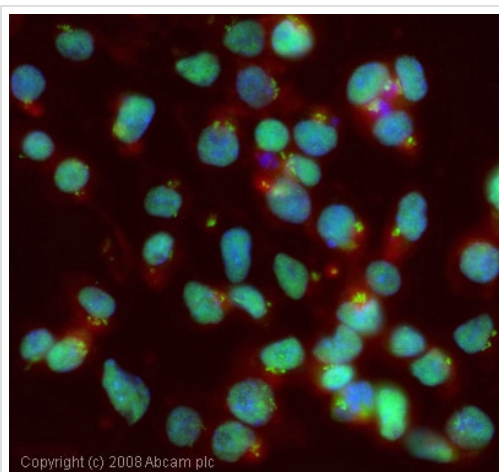
Predicted band size: 122 kDa

Observed band size: 150 kDa

Exposure time: 8 minutes

Gel type: TA

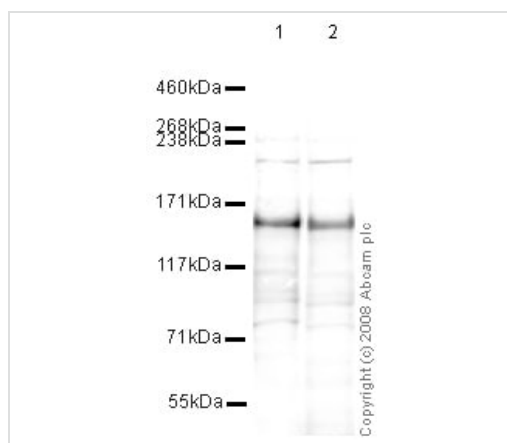
Blocking buffer: 1% milk block



Copyright (c) 2008 Abcam plc

Immunocytochemistry/ Immunofluorescence - Anti-TRIM33 antibody (ab47062)

ICC/IF image of ab47062 stained mouse embryonic stem cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab47062, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue).



Copyright (c) 2008 Abcam plc

Western blot - Anti-TRIM33 antibody (ab47062)

All lanes : Anti-TRIM33 antibody (ab47062) at 1 µg/ml

Lane 1 : F9 (Mouse embryonic carcinoma cell line) Whole Cell Lysate (**ab27193**)

Lane 2 : E14tG2a (Mouse embryonic stem cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/10000 dilution

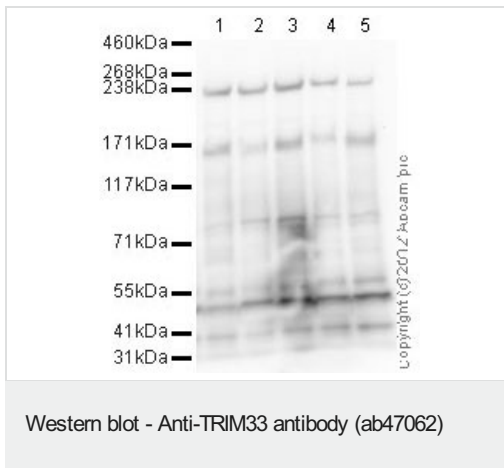
Performed under reducing conditions.

Predicted band size: 122 kDa

Observed band size: 150 kDa

Additional bands at: 220 kDa. We are unsure as to the identity of these extra bands.

The 150 kDa band observed is comparable to molecular weights seen with other commercially available antibodies to TRIM33.



All lanes : Anti-TRIM33 antibody (ab47062) at 1 µg/ml

Lane 1 : SW480 (Human colon adenocarcinoma cell line) Whole Cell Lysate

Lane 2 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 3 : HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

Lane 4 : SHSY-5Y (Human neuroblastoma cell line) Whole Cell Lysate

Lane 5 : K562 (Human erythromyeloblastoid leukemia cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab97080**) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 122 kDa

Observed band size: 150 kDa

Additional bands at: 220 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 30 seconds

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you

- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors