

Product datasheet

Anti-RASSF1 α antibody [3F3] ab23950

[13 References](#) [7 Images](#)

Overview

Product name	Anti-RASSF1a antibody [3F3]
Description	Mouse monoclonal [3F3] to RASSF1a
Host species	Mouse
Specificity	In many cases, the results of staining showed speckled pattern or weak staining in cytoplasm but we couldn't observe microtubule stained with this antibody. In mitotic cell, we could observe the mitotic spindles stained with this antibody and so thought it was kinetochore stained specifically.
Tested applications	Suitable for: ELISA, WB, IHC-P, ICC/IF, Flow Cyt
Species reactivity	Reacts with: Mouse, Human
Immunogen	Recombinant human RASSF1A purified from <i>E. coli</i> .
Epitope	ab23950 specifically recognises the C1 domain (52-101aa) of RASSF1a
Positive control	WB: HeLa lysate, 293cells transfected with HA-tagged RASSF 1A gene ICC: A431 cells
General notes	This product was changed from ascites to tissue culture supernatant on 28/02/19. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.

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.
Storage buffer	Preservative: 0.02% Thimerosal (merthiolate) Constituents: PBS, pH 7.4
Purity	Protein G purified
Clonality	Monoclonal
Clone number	3F3
Myeloma	Sp2/0
Isotype	IgG1
Light chain type	kappa

Applications

Our [Abpromise guarantee](#) covers the use of **ab23950** 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
ELISA		Use at an assay dependent concentration.
WB		1/500 - 1/2000. Detects a band of approximately 40 kDa (predicted molecular weight: 39 kDa).
IHC-P		Use at an assay dependent concentration.
ICC/IF		1/100. Use at an assay dependent dilution. Use a biotinylated secondary antibody and Texas-red conjugated streptavidin. Use 4% paraformaldehyde as fixative for 20min and permeabilize in 0.4% Triton X-100.
Flow Cyt		Use at an assay dependent concentration. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target

Function

Potential tumor suppressor. Required for death receptor-dependent apoptosis. Mediates activation of STK4 during Fas-induced apoptosis. When associated with MOAP1, promotes BAX conformational change and translocation to mitochondrial membranes in response to TNF and TNFSF10 stimulation. Isoform A interacts with CDC20, an activator of the anaphase-promoting complex, APC, resulting in the inhibition of APC activity and mitotic progression. Inhibits proliferation by negatively regulating cell cycle progression at the level of G1/S-phase transition by regulating accumulation of cyclin D1 protein. Isoform C has been shown not to perform these roles, no function has been identified for this isoform. Isoform A disrupts interactions among MDM2, DAXX and USP7, thus contributing to the efficient activation of TP53 by promoting MDM2 self-ubiquitination in cell-cycle checkpoint control in response to DNA damage.

Tissue specificity

Isoform A and isoform C are ubiquitously expressed in all tissues tested, however isoform A is absent in many corresponding cancer cell lines. Isoform B is mainly expressed in hematopoietic cells.

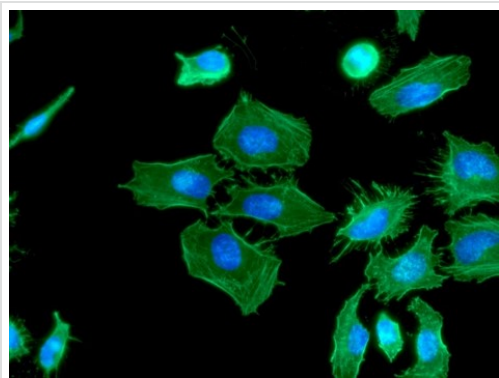
Sequence similarities

Contains 1 phorbol-ester/DAG-type zinc finger.
Contains 1 Ras-associating domain.
Contains 1 SARA domain.

Cellular localization

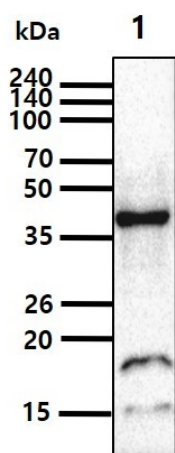
Nucleus. Predominantly nuclear and Cytoplasm > cytoskeleton. Cytoplasm > cytoskeleton > centrosome. Cytoplasm > cytoskeleton > spindle. Cytoplasm > cytoskeleton > spindle pole. Nucleus. Localizes to cytoplasmic microtubules during interphase, to bipolar centrosomes associated with microtubules during prophase, to spindle fibers and spindle poles at metaphase and anaphase, to the midzone during early telophase, and to the midbody in late telophase in cells. Colocalizes with MDM2 in the nucleus.

Images



Immunocytochemistry/ Immunofluorescence - Anti-RASSF1a antibody [3F3] (ab23950)

Immunocytochemistry/ Immunofluorescence analysis of RASSF1a in HeLa cells. The cell was stained with ab23950 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).



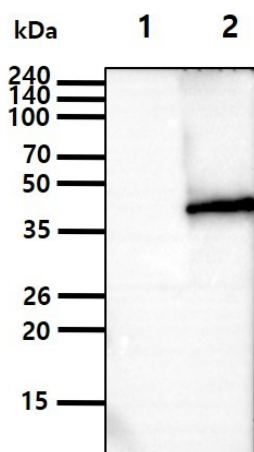
Western blot - Anti-RASSF1a antibody [3F3] (ab23950)

Anti-RASSF1a antibody [3F3] (ab23950) at 1/500 dilution + HeLa cell lysate at 40 µg

Secondary

Goat anti-mouse secondary antibody conjugated to HRP

Predicted band size: 39 kDa



Western blot - Anti-RASSF1a antibody [3F3] (ab23950)

All lanes : Anti-RASSF1a antibody [3F3] (ab23950) at 1/500 dilution

Lane 1 : 293T cell lysate

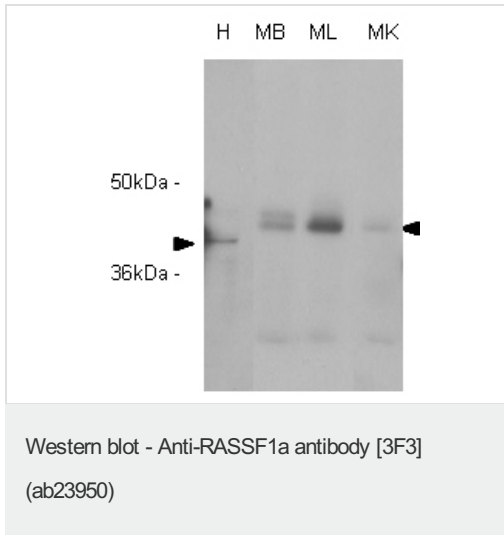
Lane 2 : RASSF1A transfected 293T cell lysate

Lysates/proteins at 5 µg per lane.

Secondary

All lanes : goat anti-mouse secondary antibody conjugated to HRP

Predicted band size: 39 kDa



All lanes : Anti-RASSF1a antibody [3F3] (ab23950) at 1/1000 dilution

- Lane 1** : HeLa (H) cell extract
- Lane 2** : Mouse brain (MB) extract
- Lane 3** : Mouse liver (ML) extract
- Lane 4** : Mouse kidney (MK) extract

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat anti-mouse HRP conjugate

Developed using the ECL technique.

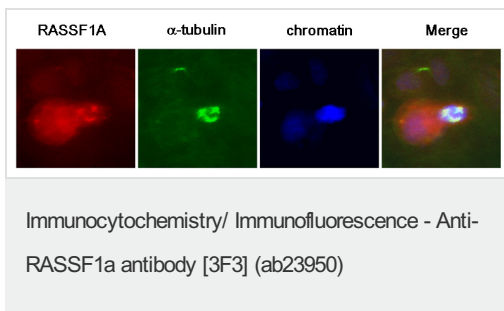
Predicted band size: 39 kDa

Observed band size: 40,43 kDa

[why is the actual band size different from the predicted?](#)

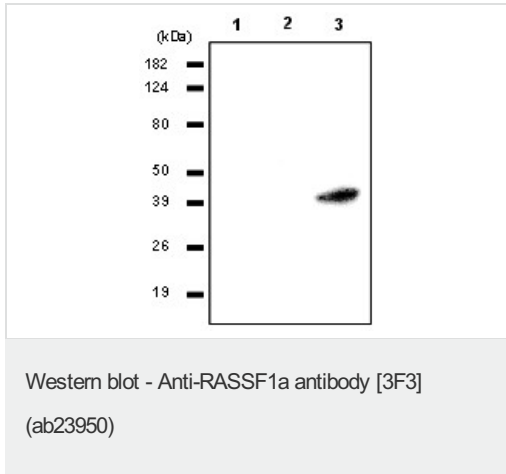
Arrows indicate RASSF1A protein (about 40kDa in HeLa cells, and 43kDa in other tissues from mice).

This image was generated using the ascites version of the product.



A431 cells were labeled with anti-RASSF1a(clone 3F3) ab23950. Detection was done using a biotinylated secondary antibody and Texas-red conjugated streptavidin.

This image was generated using the ascites version of the product.



All lanes : Anti-RASSF1a antibody [3F3] (ab23950) at 1/1000 dilution

Lane 1 : HEK293 cells

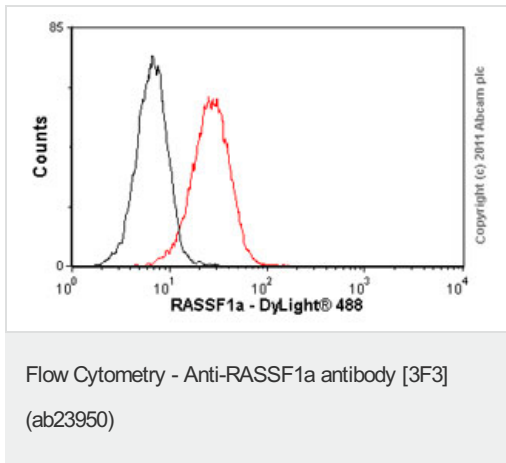
Lane 2 : A549 cells

Lane 3 : HeLa cells

Predicted band size: 39 kDa

Proteins were visualised using a goat anti-mouse secondary antibody conjugation to HRP and a ECL detection system.

This image was generated using the ascites version of the product.



Overlay histogram showing HeLA cells stained with ab23950 (red line). The cells were fixed with 100% methanol (5 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 (ab23950, 2µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was Mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed.

This image was generated using the ascites version of the product.

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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