abcam

Product datasheet

Anti-Survivin 3 alpha antibody [9H18L32] ab203571

Recombinant

7 Images

Overview

Product name	Anti-Survivin 3 alpha antibody [9H18L32]
Description	Rabbit monoclonal [9H18L32] to Survivin 3 alpha
Host species	Rabbit
Tested applications	**Suitable for:** ICC, WB
Species reactivity	**Reacts with:** Mouse, Rat, Human **Predicted to work with:** Cow, Cat, Dog, Pig, Orangutan
Immunogen	Recombinant full length protein corresponding to Human Survivin 3 alpha aa 1 to the C-terminus. Database link: **O15392** Run BLAST with Run BLAST with
Positive control	WB: U-2 OS, Jurkat, HT-29, A549, HeLa, PC-3, LNCaP, A-431, K-562, U-87 MG, MCF7, SK-BR-3, SK-BR-3 treated with LY294002 and HEK293 whole cell lysates; Mouse kidney, liver and testis tissue lysates; Rat kidney and testis tissue lysates. ICC: HeLa and MCF7 cells.

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. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.09% Sodium azide Constituent: 99% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	9H18L32
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab203571 in the following tested applications.

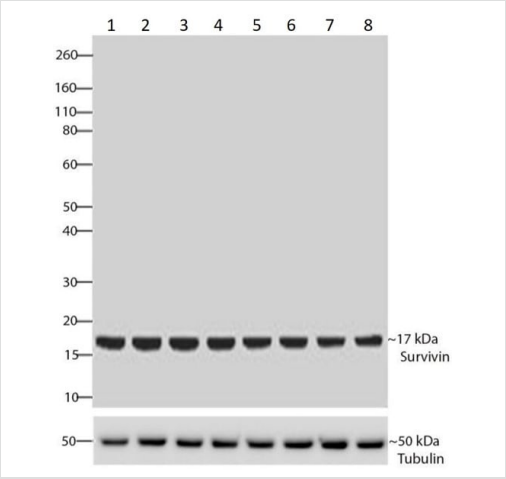
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC		Use a concentration of 5 µg/ml.
WB		Use a concentration of 2 - 5 µg/ml. Predicted molecular weight: 16 kDa.

Target

Function	Multitasking protein that has dual roles in promoting cell proliferation and preventing apoptosis. Component of a chromosome passage protein complex (CPC) which is essential for chromosome alignment and segregation during mitosis and cytokinesis. Acts as an important regulator of the localization of this complex; directs CPC movement to different locations from the inner centromere during prometaphase to midbody during cytokinesis and participates in the organization of the center spindle by associating with polymerized microtubules. The complex with RAN plays a role in mitotic spindle formation by serving as a physical scaffold to help deliver the RAN effector molecule TPX2 to microtubules. May counteract a default induction of apoptosis in G2/M phase. The acetylated form represses STAT3 transactivation of target gene promoters. May play a role in neoplasia. Inhibitor of CASP3 and CASP7. Isoform 2 and isoform 3 do not appear to play vital roles in mitosis. Isoform 3 shows a marked reduction in its anti-apoptotic effects when compared with the displayed wild-type isoform.
Tissue specificity	Expressed only in fetal kidney and liver, and to lesser extent, lung and brain. Abundantly expressed in adenocarcinoma (lung, pancreas, colon, breast, and prostate) and in high-grade lymphomas. Also expressed in various renal cell carcinoma cell lines.
Sequence similarities	Belongs to the IAP family. Contains 1 BIR repeat.
Developmental stage	Expression is cell cycle-dependent and peaks at mitosis.
Domain	The BIR repeat is necessary and sufficient for LAMTOR5 binding.
Post-translational modifications	Ubiquitination is required for centrosomal targeting. In vitro phosphorylation at Thr-117 by AURKB prevents interaction with INCENP and localization to mitotic chromosomes. Phosphorylation at Thr-48 by CK2 is critical for its mitotic and anti-apoptotic activities. Acetylation at Lys-129 by CBP results in its homodimerization, while deacetylation promotes the formation of monomers which heterodimerize with XPO1/CRM1 which facilitates its nuclear export. The acetylated form represses STAT3 transactivation. The dynamic equilibrium between its acetylation and deacetylation at Lys-129 determines its interaction with XPO1/CRM1, its subsequent subcellular localization, and its ability to inhibit STAT3 transactivation.
Cellular localization	Cytoplasm. Nucleus. Chromosome. Chromosome > centromere. Cytoplasm > cytoskeleton > spindle. Chromosome > centromere > kinetochore. Midbody. Localizes on chromosome arms and inner centromeres from prophase through metaphase. Localizes to kinetochores in metaphase, distributes to the midzone microtubules in anaphase and at telophase, localizes exclusively to the midbody. Colocalizes with AURKB at mitotic chromosomes. Acetylation at Lys-129 directs its localization to the nucleus by enhancing homodimerization and thereby inhibiting XPO1/CRM1-mediated nuclear export.

Images



Western blot - Anti-Survivin 3 alpha antibody [9H18L32] (ab203571)

All lanes : Anti-Survivin 3 alpha antibody [9H18L32] (ab203571) at 1/1000 dilution

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate
Lane 2 : U-2 OS (Human bone osteosarcoma epithelial cell line) whole cell lysate
Lane 3 : Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate
Lane 4 : A549 (Human lung carcinoma cell line) whole cell lysate
Lane 5 : K-562 (Human chronic myelogenous leukemia lymphoblast cell line) whole cell lysate
Lane 6 : U-87 MG (Human glioblastoma-astrocytoma epithelial cell line) whole cell lysate
Lane 7 : A-431 (Human epidermoid carcinoma cell line) whole cell lysate
Lane 8 : MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

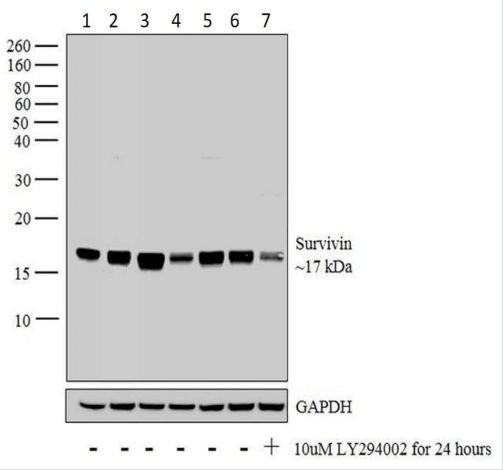
Lysates/proteins at 30 µg per lane.

Secondary
All lanes : Goat anti-Rabbit IgG (H+L) Secondary Antibody, HRP conjugate at 1/5000 dilution

Developed using the ECL technique.

Predicted band size: 16 kDa
Observed band size: 17 kDa

Blocking buffer: 5% skim milk.



Western blot - Anti-Survivin 3 alpha antibody [9H18L32] (ab203571)

All lanes : Anti-Survivin 3 alpha antibody [9H18L32] (ab203571) at 1 µg/ml

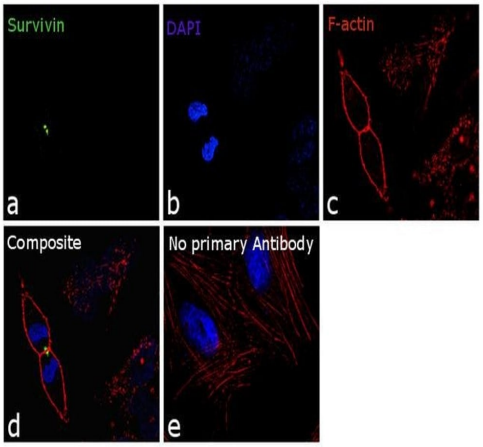
Lane 1 : HT-29 (Human colorectal adenocarcinoma cell line) whole cell lysate
Lane 2 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate
Lane 3 : PC-3 (Human prostate adenocarcinoma cell line) whole cell lysate
Lane 4 : LNCaP (Human prostate cancer cell line) whole cell lysate
Lane 5 : A-431 (Human epidermoid carcinoma cell line) whole cell lysate
Lane 6 : SK-BR-3 (Human mammary gland adenocarcinoma cell line) whole cell lysate
Lane 7 : SK-BR-3 (Human mammary gland adenocarcinoma cell line) whole cell lysate treated with LY294002 (10uM for 24 hours)

Lysates/proteins at 30 µg per lane.

Secondary
All lanes : Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, HRP conjugate at 1/4000 dilution

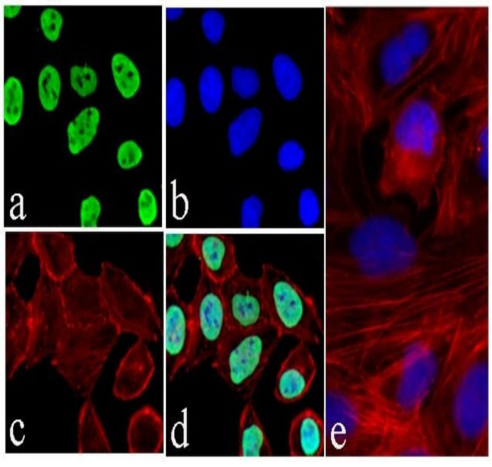
Developed using the ECL technique.

Predicted band size: 16 kDa
Observed band size: 17 kDa



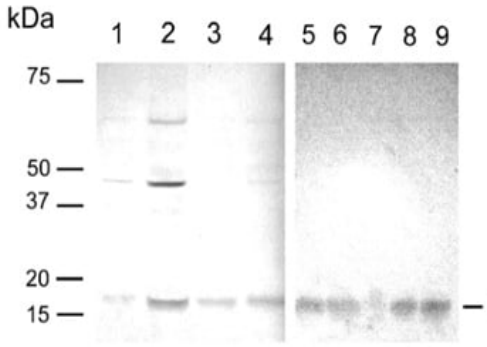
Immunocytochemistry - Anti-Survivin 3 alpha antibody [9H18L32] (ab203571)

Immunocytochemistry analysis of 70% confluent log phase HeLa cells labeling Survivin with ab203571 at 5 µg/mL. Cells were fixed in 4% Paraformaldehyde, permeabilized with 0.1% Triton™ X-100 for 10 minutes and blocked with 1% BSA for 1 hour at RT. Cells were incubated overnight at RT and then labeled with Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate at 1:2000 dilution for 45 minutes at RT (Panel A: green). Nuclei (Panel B: blue) were stained with DAPI. F-actin (Panel C: red) was stained with Alexa Fluor® 555 Rhodamine Phalloidin at 1:300 dilution. Panel D is a merged image showing staining in Late Telophase. Panel E shows no primary antibody control. The images were captured at 60X magnification.



Immunocytochemistry - Anti-Survivin 3 alpha antibody [9H18L32] (ab203571)

Immunocytochemistry analysis of 70% confluent log phase HeLa cells labeling Survivin with ab203571 at 1/1000 dilution. Cells were fixed in 4% Paraformaldehyde, permeabilized with 0.25% Triton™ X-100 for 10 minutes and blocked with 5% BSA for 1 hour at RT. Cells were incubated overnight at RT and then labeled with Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate at 1:400 dilution for 30 minutes at RT (Panel A: green). Nuclei (Panel B: blue) were stained with DAPI. F-actin (Panel C: red) was stained with Alexa Fluor® 555 Rhodamine Phalloidin at 1:300 dilution. Panel D is a merged image showing nuclear localization. Panel E shows no primary antibody control. The images were captured at 20X magnification.



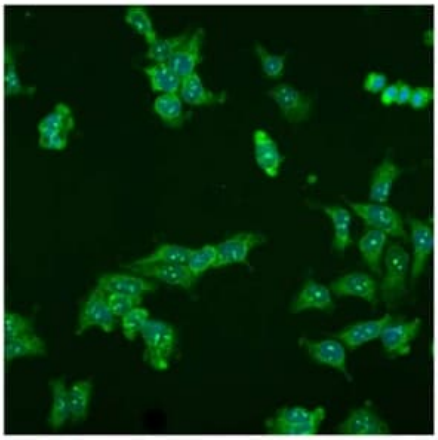
Western blot - Anti-Survivin 3 alpha antibody [9H18L32] (ab203571)

All lanes : Anti-Survivin 3 alpha antibody [9H18L32] (ab203571) at 2 µg/ml

Lane 1 : HeLa cell lysate
Lane 2 : Jurkat cell lysate
Lane 3 : A431 cell lysate
Lane 4 : HEK293 cell lysate
Lane 5 : Mouse kidney tissue lysate
Lane 6 : Mouse liver tissue lysate
Lane 7 : Mouse testis tissue lysate
Lane 8 : Rat kidney tissue lysate
Lane 9 : Rat testis tissue lysate

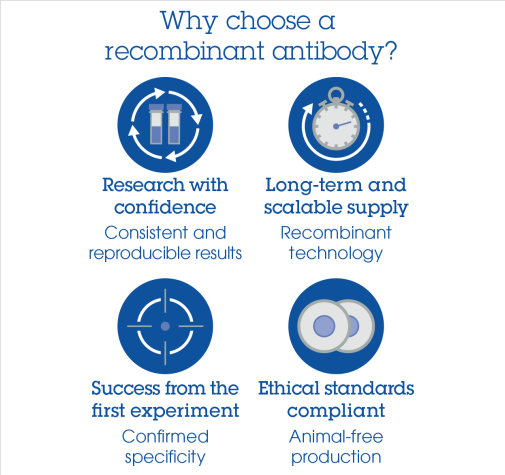
Lysates/proteins at 30 µg per lane.

Predicted band size: 16 kDa
Observed band size: 17 kDa



Immunocytochemistry - Anti-Survivin 3 alpha antibody [9H18L32] (ab203571)

Immunocytochemical analysis of 4% parafolrmaldehyde fixed MCF7 cells labeling Survivin 3 alpha using ab203571 at 5 µg/ml. Alexa Fluor® 488 Goat anti-Rabbit at 1/1000 dilution was used as secondary antibody (green). DAPI staining for nuclei (Blue).



Anti-Survivin 3 alpha antibody [9H18L32] (ab203571)

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