abcam

Product datasheet

Anti-Survivin antibody [EPR2675] ab134170

Recombinant RabMAb

★★★★★ 5 Abreviews 13 References 8 Images

Overview

Product name Anti-Survivin antibody [EPR2675]

Description Rabbit monoclonal [EPR2675] to Survivin

Host species Rabbit

Tested applications Suitable for: Flow Cyt, WB, IHC-P, ICC/IF

Unsuitable for: IP

Species reactivity Reacts with: Mouse. Rat. Human

Immunogen Synthetic peptide within Human Survivin aa 50-150. The exact sequence is proprietary.

Positive control ICC/IF: NIH/3T3 cells; IHC-P: Human tonsil, Mouse and Rat spleen tissue; Flow Cyt: MCF7 cells.

WB: HeLa, NIH/3T3, C6, Ramos and F9 whole cell lysates.

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here.

Our $\mathsf{RabMAb}^{\texttt{®}}$ technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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.

Stable for 12 months at -20°C.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal Clone number **EPR2675**

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab134170 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		1/200.
WB	★★★★★ (2)	1/300 - 1/1000. Predicted molecular weight: 16 kDa.
IHC-P	★★★★☆ (1)	1/800. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF	*** <u>*</u> (1)	1/200.

Application notes

Is unsuitable for IP.

Target

Function

Component of the chromosomal passenger complex (CPC), a complex that acts as a key regulator of mitosis. The CPC complex has essential functions at the centromere in ensuring correct chromosome alignment and segregation and is required for chromatin-induced microtubule stabilization and spindle assembly. 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 play a role in neoplasia. May counteract a default induction of apoptosis in G2/M phase. Inhibitor of caspase-3 and caspase-7. 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 HBXIP binding.

Post-translational

Ubiquitination is required for centrosomal targeting.

modifications

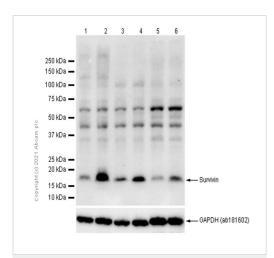
In vitro phosphorylation at Thr-117 by AURKB/STK12 prevents interaction with INCENP and

localization to mitotic chromosomes.

Cellular localization

Cytoplasm. Nucleus. Chromosome. Chromosome > centromere. Cytoplasm > cytoskeleton > spindle. Localizes on chromosome arms and inner centromeres from prophase through metaphase and then transferring to the spindle midzone and midbody from anaphase through cytokinesis. Colocalizes with AURKB at mitotic chromosomes.

Images



Western blot - Anti-Survivin antibody [EPR2675] (ab134170)

All lanes : Anti-Survivin antibody [EPR2675] (ab134170) at 1/1000 dilution (Purified)

Lane 1 : Untreated HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 2: HeLa (Human cervix adenocarcinoma epithelial cell) treated with 100ng/ml nocodazole for 24 hours whole cell lysate

Lane 3: Untreated NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate

Lane 4: NIH/3T3 (Mouse embryonic fibroblast) treated with 100ng/ml nocodazole for 24 hours whole cell lysate

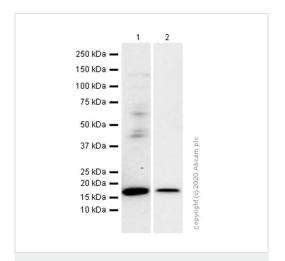
Lane 5 : Untreated C6 (Rat glial tumor glial cell) whole cell lysate Lane 6 : C6 (Rat glial tumor glial cell) treated with 100ng/ml

nocodazole for 24 hours whole cell lysate

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 16 kDa



Western blot - Anti-Survivin antibody [EPR2675] (ab134170)

All lanes : Anti-Survivin antibody [EPR2675] (ab134170) at 1/1000 dilution (Purified)

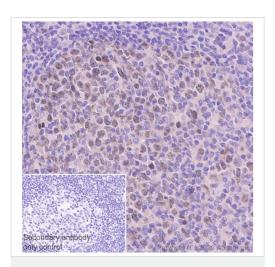
Lane 1 : Ramos (Human Burkitt's lymphoma B lymphocyte) whole cell lysate

Lane 2: F9 (Mouse embryonal carcinoma epithelial cell) whole cell lysate

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

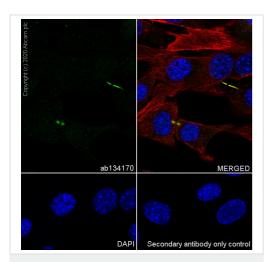
Predicted band size: 16 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Survivin antibody
[EPR2675] (ab134170)

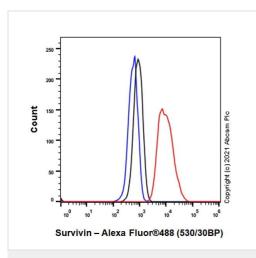
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue sections labeling Survivin with purified ab134170 at 1/800 dilution (2.67 µg/mL). Heat mediated antigen retrieval was performed using Perform heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) secondary antibody was used at 1/0 dilution. PBS instead of the primary antibody was used as the negative control.

The immunostaining was performed on a Leica Biosystems $\mathsf{BOND}^{\circledR}\mathsf{RX}$ instrument.



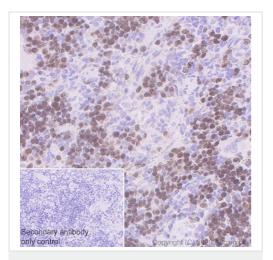
Immunocytochemistry/ Immunofluorescence - Anti-Survivin antibody [EPR2675] (ab134170)

Immunocytochemistry analysis of NIH/3T3 (Mouse embryonic fibroblast) cells labeling Survivin with purified ab134170 at 1/200 dilution (10 μ g/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 μ g/mL). Goat anti rabbit lgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 μ g/mL) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Flow Cytometry - Anti-Survivin antibody [EPR2675] (ab134170)

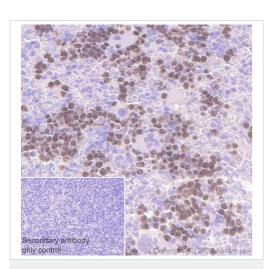
Flow Cytometry analysis of MCF7 (Human breast adenocarcinoma epithelial cell) cells labelling Survivin with purified ab134170 at 1/200 dilution (10 µg/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit lgG (Alexa Fluor® 488, <u>ab150077</u>) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal lgG (Black). Unlabelled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Survivin antibody
[EPR2675] (ab134170)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat spleen tissue sections labeling Survivin with purified ab134170 at 1/800 dilution (2.67 µg/mL). Heat mediated antigen retrieval was performed using Perform heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) secondary antibody was used at 1/0 dilution. PBS instead of the primary antibody was used as the negative control.

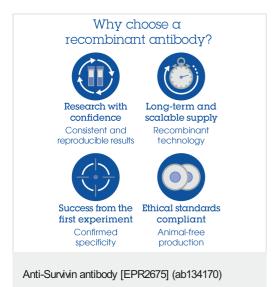
The immunostaining was performed on a Leica Biosystems $\mathsf{BOND}^{\circledR}$ RX instrument.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Survivin antibody [EPR2675] (ab134170)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse spleen tissue sections labeling Survivin with purified ab134170 at 1/800 dilution (2.67 µg/mL). Heat mediated antigen retrieval was performed using Perform heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) secondary antibody was used at 1/0 dilution. PBS instead of the primary antibody was used as the negative control. The immunostaining was performed on a Leica Biosystems

BOND® RX instrument.



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