Product datasheet

Anti-Survivin antibody [EPR2675] ab134170

Overview

Product name: Anti-Survivin antibody [EPR2675]
Description: Rabbit monoclonal [EPR2675] to Survivin
Host species: Rabbit
Tested applications:
Suitable for: WB, IHC-P, ICC, Flow Cyt
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: Human cervical carcinoma tissue; HeLa and MOLT4 cell lysates.
General notes: A trial size is available to purchase for this antibody.

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: 7.40
Preservative: 0.01% Sodium azide
Constituents: 9% PBS, 40% Glycerol, 0.05% BSA, 50% Tissue culture supernatant
Purity: Tissue culture supernatant
Clonality: Monoclonal
Clone number: EPR2675
Isotype: IgG

Applications
Is unsuitable for IP.

**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 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 modifications**
Ubiquitination is required for centrosomal targeting.
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.

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<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tbody>
<tr>
<td>IHC-P</td>
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<td>1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.</td>
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<tr>
<td>ICC</td>
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<td>1/100.</td>
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<tr>
<td>Flow Cyt</td>
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<td>1/50. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.</td>
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**Images**

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.

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Target

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.

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

**All lanes**: Anti-Survivin antibody [EPR2675] (ab134170) at 1/500 dilution

**Lane 1**: HeLa cell lysate
**Lane 2**: MOLT4 cell lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes**: Standard HRP labelled goat anti-rabbit at 1/2000 dilution

Developed using the ECL technique.

**Predicted band size**: 16 kDa

Secondary antibody - **anti-rabbit HRP** (ab6721)
**Western blot** - Anti-Survivin antibody [EPR2675] (ab134170)

**All lanes**: Anti-Survivin antibody [EPR2675] (ab134170) at 1/300 dilution

**Lane 1**: HCT 116 (Human colorectal carcinoma epithelial cell) whole cell lysate

**Lane 2**: NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate

**Lane 3**: C6 (Rat glial tumor glial cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

**Secondary**

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

**Predicted band size**: 16 kDa

**Exposure time**: 1 minute

Blocking and diluting buffer: 5% NFDM/TBST.

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Ab134170 staining Survivin in paraffin-embedded rat spleen tissue sections by Immunohistochemistry (IHC-P-paraformaldehyde-fixed, paraffin embedded sections). Samples are incubated in primary antibody at 1:300 dilution (3µg/ml). A Goat Anti-rabbit IgG H&L (HRP) (ab97051) was used as the secondary antibody at 1:500 dilution. Heat mediated antigen retrieval was performed using ab93684 (Tris/EDTA buffer, pH 9.0). Hematoxylin was used as a counterstain. Sporadically nuclear staining on rat spleen.
Ab134170 staining Survivin in C6 (rat glial tumor glial cell) cells by Immunocytochemistry. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% TritonX-100. Samples were incubated with primary antibody at 1:500 dilution (2.5µg/ml). An AlexaFluor®488 Goat anti-Rabbit (ab150077) was used as a secondary antibody at 1:1000 dilution (2µg/ml). Cells were counterstained with an Alexa Fluor®594 Anti- Alpha Tubulin [DM1A]- Microtubule Marker at 1:200 dilution (2.5µg/ml). DAPI was used as a nuclear counterstain. Confocal image showing strong midbody (arrow) staining in C6 cell line.

Ab134170 staining Survivin in paraffin-embedded mouse stomach tissue sections by Immunohistochemistry (IHC-P-paraformaldehyde-fixed, paraffin embedded sections). Samples are incubated in primary antibody at 1:300 dilution (3µg/ml). A Goat Anti-rabbit IgG H&L (HRP) (ab97051) was used as the secondary antibody at 1:500 dilution. Heat mediated antigen retrieval was performed using ab93684 (Tris/EDTA buffer, pH 9.0). Hematoxylin was used as a counterstain. Sporadically nuclear staining on mouse stomach.
Ab134170 staining Survivin in MCF7 (human breast adenocarcinoma epithelial cell line) cells by Immunocytochemistry. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% TritonX-100. Samples were incubated with primary antibody at 1:500 dilution (2.5µg/ml). An AlexaFluor®488 Goat anti-Rabbit (ab150077) was used as a secondary antibody at 1:1000 dilution (2µg/ml). Cells were counterstained with an Alexa Fluor®594 Anti- Alpha Tubulin [DM1A]- Microtubule Marker at 1:200 dilution (2.5µg/ml). DAPI was used as a nuclear counterstain. Confocal image showing strong midbody (arrow) staining in MCF7 cell line.

Immunohistochemical analysis of paraffin-embedded Human cervical carcinoma tissue, staining Survivin using ab134170 at a 1/100 dilution.

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

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