abcam

# ab310748

# Alexa Fluor® 594 Anti-Survivin antibody [EPR2675]

Recombinant | RabMAb

## Key facts

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|---|---|
| **Isotype** | IgG |
| **Host species** | Rabbit |
| **Conjugation** | Alexa Fluor® 594 |
| **Excitation/Emission** | Ex: 590nm, Em: 617nm |
| **Storage buffer** | pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | The exact immunogen used to generate this antibody is proprietary information. |
| **Clone number** | EPR2675 |
| **Purification technique** | Affinity purification Protein A |

## Reactivity data

## Target Binding Affinity

### Expected

| | |
|---|---|
| **Species** | Human, Mouse, Rat |
| **Dilution info** | Use at an assay dependent concentration. |
| **Notes** | - |

## Antibody Labelling

### Expected

| | |
|---|---|
| **Species** | Human, Mouse, Rat |
| **Dilution info** | Use at an assay dependent concentration. |
| **Notes** | - |

## Flow Cyt

### Expected

| | |
|---|---|
| **Species** | Human, Mouse, Rat |
| **Dilution info** | Use at an assay dependent concentration. |
| **Notes** | - |

## ICC/IF

### Expected

| | |
|---|---|
| **Species** | Human, Mouse, Rat |
| **Dilution info** | Use at an assay dependent concentration. |
| **Notes** | - |

## IHC-P

### Expected

| | |
|---|---|
| **Species** | Human, Mouse, Rat |
| **Dilution info** | Use at an assay dependent concentration. |
| **Notes** | - |

# Target data

See full target information BIRC5

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|---|---|
| **Function** | Multitasking protein that has dual roles in promoting cell proliferation and preventing apoptosis (PubMed:20627126, PubMed:21364656, PubMed:25778398, PubMed:28218735, PubMed:9859993). Component of a chromosome passage |

protein complex (CPC) which is essential for chromosome alignment and segregation during mitosis and cytokinesis (PubMed:16322459). 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 (PubMed:20826784). Involved in the recruitment of CPC to centromeres during early mitosis via association with histone H3 phosphorylated at 'Thr-3' (H3pT3) during mitosis (PubMed:20929775). 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 (PubMed:18591255). May counteract a default induction of apoptosis in G2/M phase (PubMed:9859993). The acetylated form represses STAT3 transactivation of target gene promoters (PubMed:20826784). May play a role in neoplasia (PubMed:10626797). Inhibitor of CASP3 and CASP7 (PubMed:21536684). Essential for the maintenance of mitochondrial integrity and function (PubMed:25778398). Isoform 2 and isoform 3 do not appear to play vital roles in mitosis (PubMed:12773388, PubMed:16291752). Isoform 3 shows a marked reduction in its anti-apoptotic effects when compared with the displayed wild-type isoform (PubMed:10626797).

## Storage

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|---|---|
| **Shipped at conditions** | Blue Ice |
| **Appropriate short-term storage duration** | 1-2 weeks |
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | -20°C |
| **Aliquoting information** | Upon delivery aliquot |
| **Storage information** | Avoid freeze / thaw cycle, Store in the dark |

## Notes

**Patented technology**
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

**How are conjugated primary antibodies validated?**
This conjugated primary antibody is released using a quantitative quality control method that evaluates binding affinity post-conjugation and efficiency of antibody labeling.
For suitable applications and species reactivity, please refer to the unconjugated version of this clone.

**What are the advantages of a recombinant monoclonal antibody?**
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 batch production

For more information, read more on recombinant antibodies.

## Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

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|---|---|
| **Activity summary** | Survivin also known as 'BIRC5 protein' is a small protein with a molecular weight of approximately 16.5 kDa. It belongs to the Inhibitor of Apoptosis (IAP) family carrying out its functions through inhibiting caspases and averting apoptosis. Survivin is expressed highly in embryonic tissues and various cancers but its expression in adult differentiated tissues is low. This selective expression pattern makes Survivin an attractive target for cancer research and therapeutic development. |
| **Biological function summary** | Survivin aids cell division and regulates apoptosis. It plays a major role as a chromosomal passenger protein functioning in concert with other members of the chromosomal passenger complex including Aurora B kinase INCENP and Borealin. During mitosis Survivin helps ensure proper chromosome alignment segregation and cytokinesis. Its ability to inhibit apoptosis allows it to enhance cell survival contributing to tumor progression when deregulated. |
| **Pathways** | Survivin is part of the cell cycle regulation and apoptosis pathways. It plays an integral role in the mitotic spindle checkpoint working closely with Aurora B kinase to regulate mitosis. Additionally the protein interfaces with the extrinsic apoptosis pathway interacting with members like XIAP to prevent caspase activation and cell death. These interactions reveal Survivin's dual function in promoting mitosis and regulating apoptosis which is essential for maintaining cellular homeostasis. |
| **Associated diseases and disorders** | Survivin is highly connected to cancer and neurodegenerative disorders. Its overexpression links with cancers such as colorectal cancer where it promotes malignancy through inhibiting apoptosis and ensuring unchecked cell division. In neurodegenerative disorders abnormal regulation of Survivin could lead to insufficient cellular survival contributing to diseases like Alzheimer's. The relationship between Survivin and XIAP in cancer highlights its potential as a therapeutic target aiming to induce apoptosis in cancer cells by overcoming Survivin-mediated resistance. |

## Product promise

**Tested**

We have tested this species and application combination and it works. It is covered by our product promise.

**Expected**

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

**Predicted**

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

**Not recommended**

We do not recommend this combination. It is not covered by our product promise.

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We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.