

Anti-Survivin Antibody

Mouse monoclonal antibody to Survivin Catalog # AP61598

Specification

Anti-Survivin Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB, IHC 015392 070201 Human, Mouse, Rat Mouse Monoclonal 16389

Anti-Survivin Antibody - Additional Information

Gene ID 332

Other Names API4; IAP4; Baculoviral IAP repeat-containing protein 5; Apoptosis inhibitor 4; Apoptosis inhibitor survivin

Target/Specificity Recognizes endogenous levels of Survivin protein.

Dilution WB~~WB (1/1000 - 1/2000), IH (1/200 - 1/500) IHC~~1:100~500

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

Anti-Survivin Antibody - Protein Information

Name BIRC5

Synonyms API4, IAP4

Function

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Multitasking protein that has dual roles in promoting cell proliferation and preventing apoptosis (PubMed:<a href="http://www.uniprot.org/citations/20627126" target="_blank">20627126</a>, PubMed:<a href="http://www.uniprot.org/citations/21364656" target="_blank">21364656</a>, PubMed:<a href="http://www.uniprot.org/citations/25778398" target="_blank">25778398</a>, PubMed:<a href="http://www.uniprot.org/citations/28218735" target="_blank">28218735</a>, PubMed:<a href="http://www.uniprot.org/citations/25778398" target="_blank">28218735</a>, PubMed:<a href="http://www.uniprot.org/citations/28218735" target="_blank">28218735</a>, PubMed:<a href="http://www.uniprot.org/citations/28218735" target="_blank">28218735</a>, PubMed:<a href="http://www.uniprot.org/citations/28218735" target="_blank">28218735</a>,
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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:<a href="http://www.uniprot.org/citations/10626797"

target="_blank">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" target="_blank">10626797).

Cellular Location

Cytoplasm. Nucleus. Chromosome Chromosome, centromere. Cytoplasm, cytoskeleton, spindle. Chromosome, centromere, kinetochore. Midbody. Note=Localizes at the centromeres from prophase to metaphase, at the spindle midzone during anaphase and a the midbody during telophase and cytokinesis. Accumulates in the nucleus upon treatment with leptomycin B (LMB), a XPO1/CRM1 nuclear export inhibitor (By similarity). 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 (PubMed:11084331) Colocalizes with AURKB at mitotic chromosomes (PubMed:14610074) Acetylation at Lys-129 directs its localization to the nucleus by enhancing homodimerization and thereby inhibiting XPO1/CRM1-mediated nuclear export (PubMed:20826784). {ECO:0000250|UniProtKB:E3SCZ8, ECO:0000269|PubMed:11084331, ECO:0000269|PubMed:14610074, ECO:0000269|PubMed:20826784}

Tissue Location

Expressed only in fetal kidney and liver, and to lesser extent, lung and brain (PubMed:10626797). Abundantly expressed in adenocarcinoma (lung, pancreas, colon, breast, and prostate) and in high-grade lymphomas (PubMed:14741722, PubMed:16329164). Also expressed in various renal cell carcinoma cell lines (PubMed:10626797). Expressed in cochlea including the organ of Corti, the lateral wall, the interdental cells of the Limbus as well as in Schwann cells and cells of the cochlear nerve and the spiral ganglions (at protein level). Not expressed in cells of the inner and outer sulcus or the Reissner's membrane (at protein level) (PubMed:20627126, PubMed:21364656)

Anti-Survivin Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.



- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Survivin Antibody - Images



Western blot analysis of Survivin expression in Hela (A), 293 (B), PC12 (C) whole cell lysates.



Immunohistochemical analysis of Survivin staining in human colon cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Anti-Survivin Antibody - Background

Recombinant protein corresponding to human Survivin.