

Anti-survivin Antibody
Catalog # ABO10793**Specification**

Anti-survivin Antibody - Product Information

Application	WB
Primary Accession	O15392
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Baculoviral IAP repeat-containing protein 5(BIRC5) detection. Tested with WB in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-survivin Antibody - Additional Information

Gene ID 332

Other Names

Baculoviral IAP repeat-containing protein 5, Apoptosis inhibitor 4, Apoptosis inhibitor survivin, BIRC5, API4, IAP4

Calculated MW

16389 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human

Subcellular 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.

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. .

Protein Name

Baculoviral IAP repeat-containing protein 5

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human survivin(121-142aa KKEFEETAKKVRRAIEQLAAMD).

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the IAP family.

Anti-survivin Antibody - Protein Information**Name** BIRC5**Synonyms** API4, IAP4**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: 21536684).

[25778398](http://www.uniprot.org/citations/25778398)). Isoform 2 and isoform 3 do not appear to play vital roles in mitosis (PubMed:[12773388](http://www.uniprot.org/citations/12773388), PubMed:[16291752](http://www.uniprot.org/citations/16291752)). Isoform 3 shows a marked reduction in its anti-apoptotic effects when compared with the displayed wild-type isoform (PubMed:[10626797](http://www.uniprot.org/citations/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 at 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

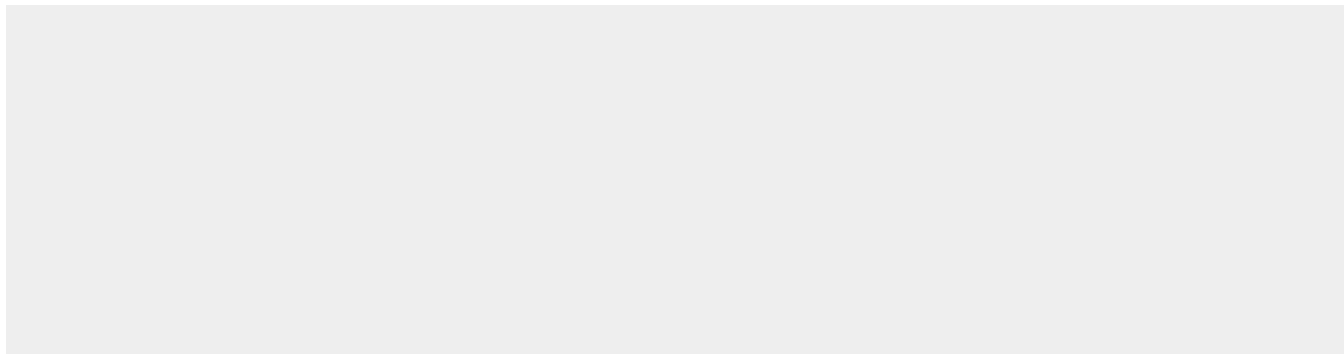
Expressed only in fetal kidney and liver, and to lesser extent, lung and brain (PubMed:10626797). Abundantly expressed in adenocarcinoma (lung, pancreas, colon, breast, and prostate) and in high-grade lymphomas (PubMed:14741722, PubMed:16329164). Also expressed in various renal cell carcinoma cell lines (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.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-survivin Antibody - Images





Anti-survivin antibody, ABO10793, Western blotting
Lane 1: HELA Cell Lysate
Lane 2: JURKAT Cell Lysate
Lane 3: CEM Cell Lysate
Lane 4: COLO320 Cell Lysate

Anti-survivin Antibody - Background

Survivin, also called baculoviral inhibitor of apoptosis repeat-containing 5 or BIRC5, is a protein that, in humans, is encoded by the BIRC5 gene. Survivin is a member of the inhibitor of apoptosis (IAP) family. The survivin gene contains 4 exons. The survivin gene is mapped to chromosome 17q25 by pulsed field gel electrophoresis and single- and 2-color FISH. The survivin protein functions to inhibit caspase activation, thereby leading to negative regulation of apoptosis or programmed cell death. The survivin protein is expressed highly in most human tumours and fetal tissue, but is completely absent in terminally differentiated cells.