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Anti-survivin Antibody

Catalog # ABO10793

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.

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
Application Details	Western blot, 0.1-0.5 □g/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. .
Source	Eukaryota
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 r˚Constitution, 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.

Protein Information

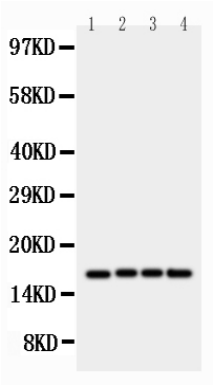
Name	BIRC5
Synonyms	API4, IAP4
Function	Multitasking protein that has dual roles in promoting cell proliferation and preventing apoptosis (PubMed:20627126, PubMed:21364656, PubMed:25778398, PubMed:28218735, PubMed:9859993). Component of a chromosome passage protein complex (CPC) which is essential for 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: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).
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)

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.

Images



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

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