10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Survivin Picoband Antibody

Catalog # ABO10069

Specification

Anti-Survivin Picoband Antibody - Product Information

Application	**WB, E**
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, ELISA in Human.

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

Anti-Survivin Picoband 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
ELISA , 0.1-0.5 µg/ml, Human, -
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 NaN3.

Immunogen
E. coli-derived human Survivin recombinant protein (Position: M1-D142). Human Survivin shares 84.3% and 83% amino acid (aa) sequence identity with mouse and rat Survivin, respectively.

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.**

Anti-Survivin Picoband 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:25778398). Isoform 2 and isoform 3 do not appear to play vital roles in mitosis (PubMed:12773388, PubMed:<a

href="http://www.uniprot.org/citations/16291752" target="_blank">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)

Anti-Survivin Picoband 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 Cytomety
- Cell Culture

Anti-Survivin Picoband Antibody - Images

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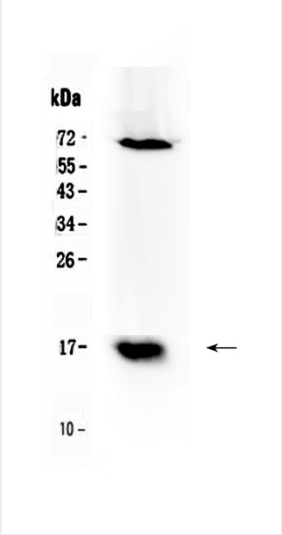

Figure 1. Western blot analysis of Survivin using anti- Survivin antibody (ABO10069). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: 293T whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Survivin antigen affinity purified polyclonal antibody (Catalog # ABO10069) at 0.5 Î¼g/mL overnight at 4Â°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Survivin at approximately 16KD. The expected band size for Survivin is at 16KD.

Anti-Survivin Picoband Antibody - Background

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