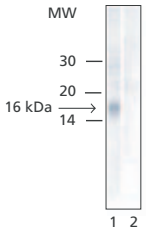
Anti-Survivin: Marker for blocking apoptosis

Progression of the cell cycle and control of apoptosis are crucial and intimately linked processes that occur in all multicellular organisms during development, normal cellular differentiation and tissue homeostasis. Survivin (TIAP, BIRC5), a 16 kDa protein, is a member of the inhibitors of apoptosis (IAP)/BIRP gene family, which includes XIAP, c-IAP-1, c-IAP-2, ILP-2, NAIP, Livin and Apollon [1-4]. IAP proteins are structurally characterized by the presence of one to three copies of a baculovirus IAP repeat (BIR), consisting of an approximately 70 amino acid zinc finger fold, and a RING finger domain. Several members of the IAP family block apoptosis by directly interacting with initiator and effector caspases and preventing their proteolytic processing and enzymatic activity. Unlike other IAPs, survivin contains only one BIR copy and a carboxyl-terminal RING finger and is unique for its dimeric structure.

Survivin is required for cell viability maintenance in mitosis, potentially coupling apoptosis to control of cell division. It is selectively expressed during mitosis during G2/M phase and is localized to mitotic spindle microtubules and midbodies of dividing cells. Survivin is over-expressed in a variety of human tumors, including adenocarcinomas of lung, pancreas, breast, colon, stomach and prostate, as well as in squamous lung cell carcinoma, acute myelogenous leukemia, large cell non-Hodgkin lymphoma, neuroblastomas and melanomas [1,5-9].

Anti-Survivin (Prod. No. **S 8191**) is produced using a peptide corresponding to amino acids 122-142 at the carboxyl-terminus of human survivin. This sequence is highly conserved (>70%) in rat and mouse survivin. Anti-Survivin recognizes human, mouse and rat survivin. The antibody is suitable for immunoblotting.

Anti-Survivin (S 8191)



Immunoblot
Whole cell extract of HeLa cells treated with thymidine was separated by SDS-PAGE and blotted with Rabbit Anti-Survivin (S 8191). The antibody was visualized with Goat Anti-Rabbit IgG, Alkaline Phosphatase conjugate (Product No. A 9919) and SIGMA FAST™ BCIP/NBT substrate (Product No. B 5655)
Inhibition with survivin peptide (Lane 2).

References
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Related Antibodies

I 4782	**Anti-ILP2** (rabbit)
N 6648	**Anti-NAIP** (rabbit)
X 2503	**Anti-XIAP** (rabbit)

Related Proteins

L 1040	**Livin β/ML-IAP, human recombinant**
X 3378	**XIAP, human recombinant**

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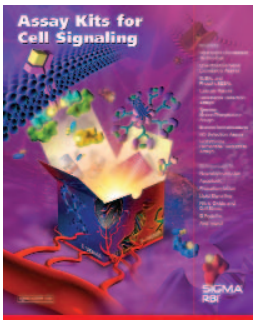

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