



## Rabbit Anti-Survivin antibody

SLM-54474R

**Product Name** Survivin**Chinese Name** Apoptosis 抑制因子 Recombinant rabbit monoclonal anti**Alias** API4; API-4; API 4; Survivin variant 3 alpha; Apoptosis Inhibitor 4; Apoptosis inhibitor survivin; Apoptosis inhibitor4; Baculoviral IAP repeat containing 5; Baculoviral IAP repeat containing protein 5; Baculoviral IAP repeat-containing protein 5; BIRC 5; BIRC5; BIRC-5; EPR 1; EPR-1; IAP4; IAP-4; IAP 4; SVV; TIAP; BIRC5\_MOUSE.**Research Area** Tumour Cell biology immunology Apoptosis**Immunogen Species** Rabbit**Clonality** Monoclonal**Clone NO.** 4C7**React Species** Human**Applications** WB=1:500-2000,IHC-P=1:50-200,IHC-F=1:50-200,IF=1:50-200 (Paraffin sections need antigen repair)  
not yet tested in other applications.  
optimal dilutions/concentrations should be determined by the end user.**Theoretical molecular weight** 16kDa**Cellular localization** The nucleus cytoplasmic**Form** Liquid**Concentration** 1mg/ml**immunogen** recombinant mouse Survivin protein**Lsotype** IgG**Purification** affinity purified by Protein A**Buffer Solution** 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.**Storage** Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.**Attention** This product as supplied is intended for research use only, not for use in human, therapeutic

or diagnostic applications.

## PubMed

### [PubMed](#)

May play a role in neoplasia. May counteract a default induction of apoptosis in G2/M phase. Interacts with tubulin. Inhibitor of caspase-3 and caspase-7. Component of the chromosomal passenger complex (CPC), a complex that acts as a key regulator of mitosis. The CPC complex has essential functions at the centromere in ensuring correct chromosome alignment and segregation and is required for chromatin-induced microtubule stabilization and spindle assembly (By similarity). Belongs to the IAP family.

### **Function:**

Multitasking protein that has dual roles in promoting cell proliferation and preventing apoptosis. Component of a chromosome passage protein complex (CPC) which is essential for chromosome alignment and segregation during mitosis and cytokinesis. 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. 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. May counteract a default induction of apoptosis in G2/M phase. The acetylated form represses STAT3 transactivation of target gene promoters. May play a role in neoplasia. Inhibitor of CASP3 and CASP7. Isoform 2 and isoform 3 do not appear to play vital roles in mitosis. Isoform 3 shows a marked reduction in its anti-apoptotic effects when compared with the displayed wild-type isoform.

## Product Detail

### **Subunit:**

Monomer or homodimer. Exists as a homodimer in the apo state and as a monomer in the CPC-bound state. The monomer protects cells against apoptosis more efficiently than the dimer. Only the dimeric form is capable of enhancing tubulin stability in cells. When phosphorylated, interacts with Hbxip; the resulting complex binds pro-CASP9, as well as active CASP9, but much less efficiently. Component of the chromosomal passenger complex (CPC) composed of at least BIRC5/survivin, CDCA8/borealin, INCENP, AURKB and AURKC. Interacts with JTB. Interacts with CDCA8 and INCENP; interaction is direct. Interacts with EVI5. Interacts with GTP-bound RAN in both the S and M phases of the cell cycle. Interacts with USP9X. Interacts with tubulin. Interacts with BIRC2/c-IAP1. The acetylated form at Lys-129 interacts with STAT3. The monomeric form deacetylated at Lys-129 interacts with XPO1/CRM1. The monomeric form interacts with XIAP/BIRC4. Both the dimeric and monomeric form can interact with DIABLO/SMAC. Interacts with BIRC6/bruce.

### **Subcellular Location:**

Cytoplasm. Nucleus. Chromosome. Chromosome, centromere. Cytoplasm, cytoskeleton, spindle. Chromosome, centromere, kinetochore. Midbody. Note=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.

**Post-translational modifications:**

Ubiquitination is required for centrosomal targeting.

In vitro phosphorylation at Thr-117 by AURKB prevents interaction with INCENP and localization to mitotic chromosomes. Phosphorylation at Thr-48 by CK2 is critical for its mitotic and anti-apoptotic activities.

Acetylation at Lys-129 by CBP results in its homodimerization, while deacetylation promotes the formation of monomers which heterodimerize with XPO1/CRM1 which facilitates its nuclear export. The acetylated form represses STAT3 transactivation. The dynamic equilibrium between its acetylation and deacetylation at Lys-129 determines its interaction with XPO1/CRM1, its subsequent subcellular localization, and its ability to inhibit STAT3 transactivation.

**Similarity:**

Belongs to the IAP family.

Contains 1 BIR repeat.

**SWISS:**

O15392

**Gene ID:**

332

**Database links:**

[Entrez Gene: 332](#) Human

[Entrez Gene: 11799](#) Mouse

[Entrez Gene: 64041](#) Rat

[Omim: 603352](#) Human

[SwissProt: O15392](#) Human

[SwissProt: O70201](#) Mouse

[SwissProt: Q9JHY7](#) Rat

[Unigene: 514527](#) Human

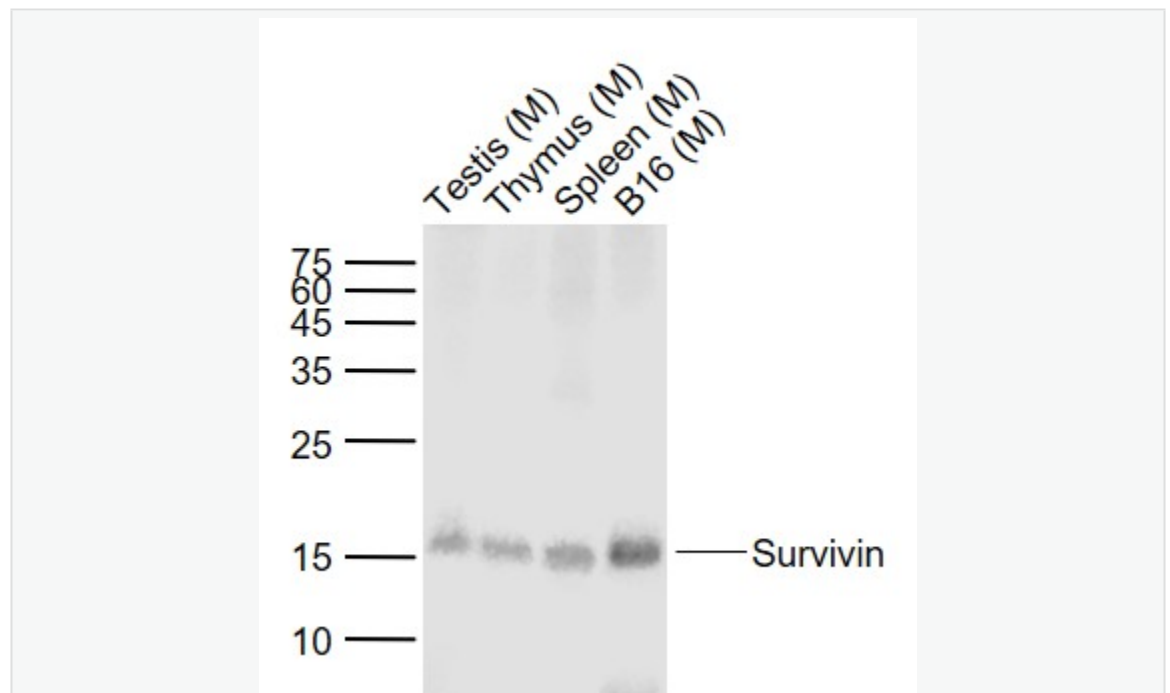
[Unigene: 8552](#) Mouse

[Unigene: 54471](#) Rat

Survivin 是目前发现的最强的凋亡抑制因子，存活蛋白是 Apoptosis 抑制基因家族中的一个新成员，主要表达于细胞周期中的 G2/M 期，在许多恶性 Tumour 组织中均有表达，主要用于各种恶性 Tumour 的研究。

是 Apoptosis 的一种抑制因子、参与 Apoptosis 调控，可以用于各种恶性 Tumour 的 Apoptosis 的研究。Survivin 具有 Tumour 特异性，只表达于 Tumour 和胚胎组织，且与 Tumour 细胞的分化增殖及浸润转移密切相关。

**Product  
Picture**



Sample:

Lane 1: Testis (Mouse) Lysate at 40 ug

Lane 2: Thymus (Mouse) Lysate at 40 ug

Lane 3: Spleen (Mouse) Lysate at 40 ug

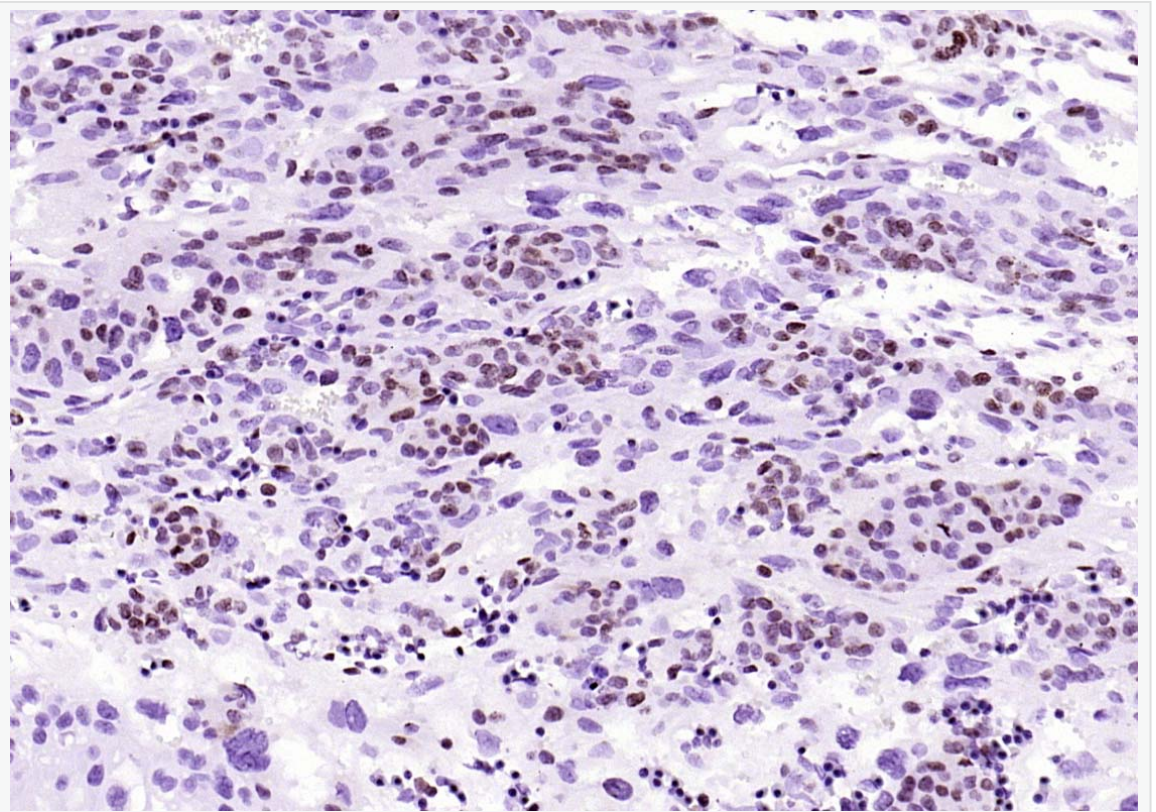
Lane 4: B16 (Mouse) Cell Lysate at 30 ug

Primary: Anti-Survivin (SLM-54474R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 18 kD

Observed band size: 16 kD



Paraformaldehyde-fixed, paraffin embedded (mouse placenta); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Survivin) Monoclonal Antibody, Unconjugated



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(SLM-54474R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.