

Product Specification Sheet

Survivin (BIRC5; AIP4; EPR1) Antibodies

Cat # SURV11-P	Human Survivin Control/Blocking Peptide	SIZE: 100 ug
Cat # SURV11-A	Rabbit anti-human Survivin IgG (affinity pure)	SIZE: 100 ug

Apoptosis is a form of cell death that permits the removal of damaged, senescent or unwanted cells in multicellular organisms, without damage to the cellular microenvironment.

Survivin is a member of the inhibitor of apoptosis (IAP) gene family, which encodes negative regulatory proteins that prevent apoptotic cell death. IAP family members usually contain multiple baculovirus IAP repeat (BIR) domains, but this gene encodes proteins with only a single BIR domain. The encoded proteins also lack a C-terminus RING finger domain. Gene expression is high during fetal development and in most tumors yet low in adult tissues. At least four transcript variants encoding distinct isoforms have been found for this gene, but the full-length nature of only three of them have been determined. Survivin appears to have an important role in regulating apoptosis at cell cycle checkpoint(s). Survivin expression is highly cell cycle-regulated, and is detectable in the nucleus selectively at the G2/M phase.

Survivin (alpha): rat: 142 aa; mouse: 140 aa; human: 142 aa; 16.4 kDa; chromosome: 17q25; mainly expressed 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.

Source of Antigen, Antibodies

Antigen	21- aa peptide of Human BIRC5 (Protein accession # O15392 ; ref. 1); designated as SURV11-P control/blocking peptide conjugated to KLH
Epitope Location	~C-terminus
Antibody host/type	Rabbit, Polyclonal IgG (Cat # SURV11-A), purified over antigen-Agarose
Secondary Ab	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
Negative Control Ab	Non-immune rabbit IgG (Cat # 20009-1) to be used as -ve control for ELISA, WB, IHC etc.

Form & Storage of Antibodies/Peptide Control

Affinity pure IgG
100 ug/100ul solution lyophilized powder
Supplied in **Buffer:** PBS+0.1% BSA
Reconstitute powder in PBS at 1mg/ml

Control/blocking peptide
100 ug/100 ul solution lyophilized powder
Supplied in Buffer: PBS pH 7.5,
Reconstitute powder in PBS at 1 mg/ml.

Storage

Short-term: unopened, undiluted vials for less than a week at 4oC.

Long-term: at -20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20°C or below.

Shipping: 4°C for solutions and room temp for powder.

Recommended Usage

Western Blotting: 1-10 µg/ml; using affinity pure antibody (chemiluminescence technique).

ELISA: 1:100K; using 50-100 ng control peptide/well.

Histochemistry & Immunofluorescence: Not tested; we recommend the use of affinity purified antibody at 2-10 µg/ml.

Specificity & Cross-reactivity

Human SURV11-P peptide sequence is 90% conserved in mouse, pig and dog and 85% in rat. This peptide sequence has a 100% homology to isoforms 1 (alpha) and 2B (beta) of the human Survivin protein. Antibody cross-reactivity in various species is not known. The control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity (see detailed protocol at the web site).

General References:

- (1) Ambrosini, G.; Adida, C.; Altieri, D. C., *Nature Med.* 3: 917-921, 1997.

List of related items, data sheets, and publications, using ADI antibodies is posted on the web site

*This product is for in vitro research use only.

Related material available from ADI

Antibodies to all isoforms of Human Survivin.

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