

BIRC7 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP6128a**Specification**

BIRC7 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q96CA5](#)**BIRC7 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 79444**Other Names**

Baculoviral IAP repeat-containing protein 7, 632-, Kidney inhibitor of apoptosis protein, KIAP, Livin, Melanoma inhibitor of apoptosis protein, ML-IAP, RING finger protein 50, Baculoviral IAP repeat-containing protein 7 30kDa subunit, Truncated livin, p30-Livin, tLivin, BIRC7, KIAP, LIVIN, MLIAP, RNF50

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP6128a](/product/products/AP6128a) was selected from the C-term region of human BIRC7. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

BIRC7 Antibody (C-term) Blocking Peptide - Protein Information**Name** BIRC7**Synonyms** KIAP, LIVIN, MLIAP, RNF50**Function**

Apoptotic regulator capable of exerting proapoptotic and anti-apoptotic activities and plays crucial roles in apoptosis, cell proliferation, and cell cycle control (PubMed: [11162435](http://www.uniprot.org/citations/11162435), PubMed: [11024045](http://www.uniprot.org/citations/11024045), PubMed: [11084335](http://www.uniprot.org/citations/11084335), PubMed: [16729033](http://www.uniprot.org/citations/16729033), PubMed: [17294084](http://www.uniprot.org/citations/17294084)). Its

anti-apoptotic activity is mediated through the inhibition of CASP3, CASP7 and CASP9, as well as by its E3 ubiquitin-protein ligase activity (PubMed:11024045, PubMed:16729033). As it is a weak caspase inhibitor, its anti-apoptotic activity is thought to be due to its ability to ubiquitinate DIABLO/SMAC targeting it for degradation thereby promoting cell survival (PubMed:16729033). May contribute to caspase inhibition, by blocking the ability of DIABLO/SMAC to disrupt XIAP/BIRC4-caspase interactions (PubMed:16729033). Protects against apoptosis induced by TNF or by chemical agents such as adriamycin, etoposide or staurosporine (PubMed:11162435, PubMed:11084335, PubMed:11865055). Suppression of apoptosis is mediated by activation of MAPK8/JNK1, and possibly also of MAPK9/JNK2 (PubMed:11865055). This activation depends on TAB1 and MAP3K7/TAK1 (PubMed:11865055). In vitro, inhibits CASP3 and proteolytic activation of pro-CASP9 (PubMed:11024045).

Cellular Location

Nucleus. Cytoplasm. Golgi apparatus. Note=Nuclear, and in a filamentous pattern throughout the cytoplasm. Full-length livin is detected exclusively in the cytoplasm, whereas the truncated form (tLivin) is found in the peri-nuclear region with marked localization to the Golgi apparatus; the accumulation of tLivin in the nucleus shows positive correlation with the increase in apoptosis

Tissue Location

Isoform 1 and isoform 2 are expressed at very low levels or not detectable in most adult tissues. Detected in adult heart, placenta, lung, lymph node, spleen and ovary, and in several carcinoma cell lines. Isoform 2 is detected in fetal kidney, heart and spleen, and at lower levels in adult brain, skeletal muscle and peripheral blood leukocytes

BIRC7 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

BIRC7 Antibody (C-term) Blocking Peptide - Images

BIRC7 Antibody (C-term) Blocking Peptide - Background

BIRC7 is a member of the family of inhibitor of apoptosis proteins (IAP) and contains a single copy of a baculovirus IAP repeat (BIR) as well as a RING-type zinc finger domain. The BIR domain is essential for inhibitory activity and interacts with caspases, while the RING finger domain sometimes enhances antiapoptotic activity but does not inhibit apoptosis alone. Two transcript variants encoding different isoforms have been found for this gene. The two isoforms have different antiapoptotic properties, with isoform alpha protecting cells from apoptosis induced by staurosporine and isoform b protecting cells from apoptosis induced by etoposide.

BIRC7 Antibody (C-term) Blocking Peptide - References

Clark, H.F., et al., Genome Res. 13(10):2265-2270 (2003). Gazzaniga, P., et al., Ann. Oncol. 14(1):85-90 (2003). Vucic, D., et al., J. Biol. Chem. 277(14):12275-12279 (2002). Sanna, M.G., et al., Mol. Cell. Biol. 22(6):1754-1766 (2002). Kasof, G.M., et al., J. Biol. Chem. 276(5):3238-3246 (2001).