

## BIRC1 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP6123a

### **Specification**

## BIRC1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession <u>Q13075</u> Other Accession <u>NP 004527</u>

## BIRC1 Antibody (C-term) Blocking Peptide - Additional Information

**Gene ID 4671** 

#### **Other Names**

Baculoviral IAP repeat-containing protein 1, Neuronal apoptosis inhibitory protein, NAIP, BIRC1

### **Target/Specificity**

The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP6123a>AP6123a</a> was selected from the C-term region of human BIRC1 . 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.

### BIRC1 Antibody (C-term) Blocking Peptide - Protein Information

Name NAIP

### Synonyms BIRC1

### **Function**

Anti-apoptotic protein which acts by inhibiting the activities of CASP3, CASP7 and CASP9. Can inhibit the autocleavage of pro-CASP9 and cleavage of pro-CASP3 by CASP9. Capable of inhibiting CASP9 autoproteolysis at 'Asp-315' and decreasing the rate of auto proteolysis at 'Asp-330'. Acts as a mediator of neuronal survival in pathological conditions. Prevents motor-neuron apoptosis induced by a variety of signals. Possible role in the prevention of spinal muscular atrophy that seems to be caused by inappropriate persistence of motor- neuron apoptosis: mutated or deleted forms of NAIP have been found in individuals with severe spinal muscular atrophy.

## **Tissue Location**



Expressed in motor neurons, but not in sensory neurons. Found in liver and placenta, and to a lesser extent in spinal cord

### BIRC1 Antibody (C-term) Blocking Peptide - Protocols

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

#### Blocking Peptides

BIRC1 Antibody (C-term) Blocking Peptide - Images

# BIRC1 Antibody (C-term) Blocking Peptide - Background

The gene coding for BIRC1 is part of a 500 kb inverted duplication on chromosome 5q13. This duplicated region contains at least four genes and repetitive elements which make it prone to rearrangements and deletions. The repetitiveness and complexity of the sequence have also caused difficulty in determining the organization of this genomic region. This copy of the gene is full length; additional copies with truncations and internal deletions are also present in this region of chromosome 5q13. It is thought that this gene is a modifier of spinal muscular atrophy caused by mutations in a neighboring gene, SMN1. The BIRC1 protein contains regions of homology to two baculovirus inhibitor of apoptosis proteins, and it is able to suppress apoptosis induced by various signals. A second transcript for this gene has been described, but its full length nature has not been determined.

## BIRC1 Antibody (C-term) Blocking Peptide - References

Notarbartolo, M., et al., Leuk. Res. 26(9):857-862 (2002). Monani, U.R., et al., Hum. Mol. Genet. 8(7):1177-1183 (1999). Yamamoto, K., et al., Biochem. Biophys. Res. Commun. 264(3):998-1006 (1999). Chen, Q., et al., Genomics 48(1):121-127 (1998). Liston, P., et al., Nature 379(6563):349-353 (1996).