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# BIRC6 Antibody (C-Term)

**Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP22251b**

## Specification

### BIRC6 Antibody (C-Term) - Product Information

| | |
|---|---|
| Application | **WB, FC,E** |
| Primary Accession | Q9NR09 |
| Reactivity | **Human** |
| Host | **Rabbit** |
| Clonality | **polyclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **530269** |

### BIRC6 Antibody (C-Term) - Additional Information

**Gene ID** 57448

**Other Names**
Baculoviral IAP repeat-containing protein 6, 6.3.2.-, BIR repeat-containing ubiquitin-conjugating enzyme, BRUCE, Ubiquitin-conjugating BIR domain enzyme apollon, APOLLON, BIRC6, KIAA1289

**Target/Specificity**
This BIRC6 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 4810-4844 amino acids from human BIRC6.

**Dilution**
WB~~1:1000
FC~~1:25
E~~Use at an assay dependent concentration.

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
BIRC6 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

### BIRC6 Antibody (C-Term) - Protein Information

**Name** BIRC6

**Synonyms** KIAA1289

**Function** Anti-apoptotic protein known as inhibitor of apoptosis (IAP) which can regulate cell death by controlling caspases and by acting as an E3 ubiquitin-protein ligase (PubMed:14765125, PubMed:15200957, PubMed:18329369). Unlike most IAPs, does not contain a RING domain and it is not a RING-type E3 ligase (PubMed:15200957, PubMed:36758104, PubMed:36758105, PubMed:36758106). Instead acts as a dual E2/E3 enzyme that combines ubiquitin conjugating (E2) and ubiquitin ligase (E3) activities in a single polypeptide (PubMed:15200957, PubMed:36758104, PubMed:36758105, PubMed:36758106). Ubiquitination is mediated by a non- canonical E1 ubiquitin activating enzyme UBA6 (PubMed:36758104, PubMed:36758105, PubMed:36758106). Ubiquitinates CASP3, CASP7 and CASP9 and inhibits their caspase activity; also ubiquitinates their procaspases but to a weaker extent (PubMed:15200957, PubMed:36758104, PubMed:36758105, PubMed:36758106). Ubiquitinates pro-apoptotic factors DIABLO/SMAC and HTRA2 (PubMed:15200957, PubMed:36758104, PubMed:36758105, PubMed:36758106). DIABLO/SMAC antagonizes the caspase inhibition activity of BIRC6 by competing for the same binding sites as the caspases (PubMed:18329369, PubMed:36758106). Ubiquitinates the autophagy protein MAP1LC3B; this activity is also inhibited by DIABLO/SMAC (PubMed:36758105). Important regulator for the final stages of cytokinesis (PubMed:18329369). Crucial for normal vesicle targeting to the site of abscission, but also for the integrity of the midbody and the midbody ring, and its striking ubiquitin modification (PubMed:18329369).

**Cellular Location**
Golgi apparatus, trans-Golgi network membrane. Endosome Cytoplasm, cytoskeleton, spindle pole Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Midbody, Midbody ring. Note=Exhibits cell cycle-dependent localization. Concentrates in a pericentriolar compartment in interphase, moves partially to spindle poles in metaphase, and finally localizes to the spindle midzone and the midbody in telophase and during cytokinesis. On the midbody, localizes to the midbody ring, also called Flemming body (PubMed:18329369). In interphase cells, localizes to the trans-Golgi network membrane and endosomes. During cytokinesis, a fraction moves to the midzone where it specifically arrives at the midbody ring. After abscission completion, travels with the midbody remnant into one daughter cell, and remains bound to it until a new midbody ring is formed during the next cell division (PubMed:18329369)

**Tissue Location**
Expressed in brain cancer cells.

## BIRC6 Antibody (C-Term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## BIRC6 Antibody (C-Term) - Images

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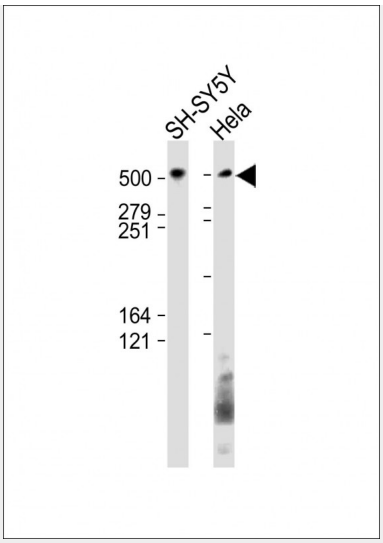
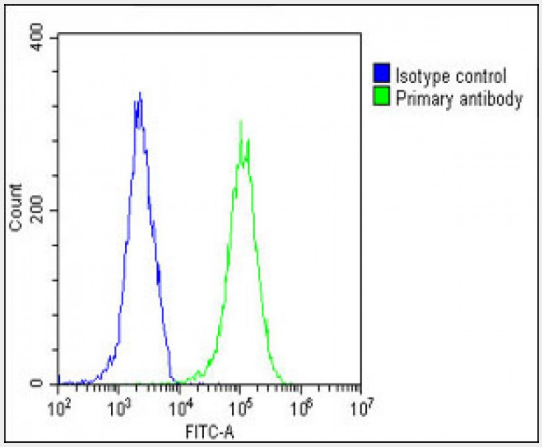



All lanes : Anti-BIRC6 Antibody (C-Term) at 1:1000 dilution Lane 1: SH-SY5Y whole cell lysate Lane 2: Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 530 kDa Blocking/Dilution buffer: 5% NFDM/TBST.




Overlay histogram showing Hela cells stained with AP22251b(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22251b, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OE188374) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

**BIRC6 Antibody (C-Term) - Background**

Anti-apoptotic protein which can regulate cell death by controlling caspases and by acting as an E3 ubiquitin-protein ligase. Has an unusual ubiquitin conjugation system in that it could combine in a single polypeptide, ubiquitin conjugating (E2) with ubiquitin ligase (E3) activity, forming a chimeric E2/E3 ubiquitin ligase. Its tragets include CASP9 and DIABLO/SMAC. Acts as an inhibitor of CASP3, CASP7 and CASP9. Important regulator for the final stages of cytokinesis. Crucial for normal vesicle targeting to the site of abscission, but also for the integrity of the midbody and the midbody ring, and its striking ubiquitin modification.

**BIRC6 Antibody (C-Term) - References**

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