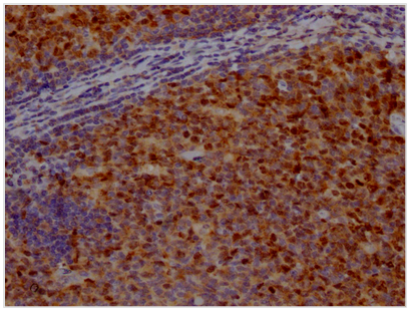
BIRC5 Antibody

Product Code	CSB-RA209144A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	O15392
Immunogen	A synthesized peptide derived from human Survivin
Species Reactivity	Human
Tested Applications	ELISA, IHC; Recommended dilution: IHC:1:50-1:200
Relevance	Multitasking protein that has dual roles in promoting cell proliferation and preventing apoptosis (PubMed:9859993, PubMed:21364656, PubMed:20627126). Component of a chromosome passage protein complex (CPC) which is essential for chromosome alignment and segregation during mitosis and cytokinesis (PubMed:16322459). 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 (PubMed:20826784). Involved in the recruitment of CPC to centromeres during early mitosis via association with histone H3 phosphorylated at 'Thr-3' (H3pT3) during mitosis (PubMed:20929775). 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 (PubMed:18591255). May counteract a default induction of apoptosis in G2/M phase (PubMed:9859993). The acetylated form represses STAT3 transactivation of target gene promoters (PubMed:20826784). May play a role in neoplasia (PubMed:10626797). Inhibitor of CASP3 and CASP7 (PubMed:21536684). Isoform 2 and isoform 3 do not appear to play vital roles in mitosis (PubMed:12773388, PubMed:16291752). Isoform 3 shows a marked reduction in its anti-apoptotic effects when compared with the displayed wild-type isoform (PubMed:10626797).
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Neuroscience; Cancer; Cell biology
Gene Names	BIRC5

Accession NO. 6G11

Image



IHC image of CSB-RA209144A0HU diluted at 1:100 and staining in paraffin-embedded human tonsil tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

BIRC5 is an immune-related gene that inhibits apoptosis and promotes cell proliferation. As a mitotic checkpoint gene, BIRC5 serves a pivotal role in the onset and development of various types of malignant tumors. BIRC5 is highly expressed in most tumors and leads to poor prognosis in cancer patients. Overexpression of BIRC5 in cancer may inhibit this apoptotic checkpoint and favor aberrant mitosis of transformed cells. BIRC5 can inhibit the migration and invasion of tumor cells, and regulate the expression of angiogenesis-associated factors.

The production of this recombinant BIRC5 antibody was carried out in vitro. It began with immunization of animals so that the B cells could be obtained. The next step was selection of B cells. The positive cells would be screened out for the next step, single B cell antibody sequencing and cloning. Once the BIRC5 antibody sequence was obtained, it would be inserted into a plasmid, which could be transfected into mammalian cells for the expression of BIRC5 antibody.