

# BIRC8 (C-16): sc-130107

## BACKGROUND

The RING-type zinc-finger motif is present in a number of viral and eukaryotic proteins and is made of a conserved cysteine-rich domain that is able to bind two zinc atoms. BIRC8 (baculoviral IAP repeat-containing 8), also known as ILP2, is a 236 amino acid protein that localizes to the cytoplasm and contains one BIR repeat and one RING-type zinc-finger motif. Expressed in normal testis, as well as in cancerous tissue, BIRC8 functions to protect cells against Bax-mediated apoptosis, suggesting a possible role in tumor transformation and progression. The gene encoding BIRC8 maps to human chromosome 19, which is the genetic home for a number of immunoglobulin superfamily members, including the killer cell and leukocyte Ig-like receptors, several ICAMs, the CEACAM and PSG family and Fc receptors (FcRs). Key genes for eye color and hair color also map to chromosome 19.

## REFERENCES

- Borden, K.L. and Freemont, P.S. 1996. The RING finger domain: a recent example of a sequence-structure family. *Curr. Opin. Struct. Biol.* 6: 395-401.
- Lorick, K.L., Jensen, J.P., Fang, S., Ong, A.M., Hatakeyama, S. and Weissman, A.M. 1999. RING fingers mediate ubiquitin-conjugating enzyme (E2)-dependent ubiquitination. *Proc. Natl. Acad. Sci. USA* 96: 11364-11369.
- Lagace, M., Xuan, J.Y., Young, S.S., McRoberts, C., Maier, J., Rajcan-Separovic, E. and Korneluk, R.G. 2001. Genomic organization of the X-linked inhibitor of apoptosis and identification of a novel testis-specific transcript. *Genomics* 77: 181-188.
- Richter, B.W., Mir, S.S., Eiben, L.J., Lewis, J., Reffey, S.B., Frattini, A., Tian, L., Frank, S., Youle, R.J., Nelson, D.L., Notarangelo, L.D., Vezzoni, P., Fearnhead, H.O. and Duckett, C.S. 2001. Molecular cloning of ILP-2, a novel member of the inhibitor of apoptosis protein family. *Mol. Cell. Biol.* 21: 4292-4301.
- Jin, X., Mitsumata, M., Yamane, T. and Yoshida, Y. 2002. Induction of human inhibitor of apoptosis protein-2 by shear stress in endothelial cells. *FEBS Lett.* 529: 286-292.
- Shin, H., Renatus, M., Eckelman, B.P., Nunes, V.A., Sampaio, C.A. and Salvesen, G.S. 2005. The BIR domain of IAP-like protein 2 is conformationally unstable: implications for caspase inhibition. *Biochem. J.* 385: 1-10.
- Abe, S., Yamamoto, K., Hasegawa, M., Inoue, M., Kurata, M., Hirokawa, K., Kitagawa, M., Nakagawa, Y. and Suzuki, K. 2005. Bone marrow cells of myelodysplastic syndromes exhibit significant expression of apollon, livin and ILP-2 with reduction after transformation to overt leukemia. *Leuk. Res.* 29: 1095-1096.

## CHROMOSOMAL LOCATION

Genetic locus: BIRC8 (human) mapping to 19q13.41.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## SOURCE

BIRC8 (C-16) is a purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of BIRC8 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin, 6% glycerol, 0.01% BSA and 0.002% thimerosal.

## APPLICATIONS

BIRC8 (C-16) is recommended for detection of BIRC8 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for BIRC8 siRNA (h): sc-97225, BIRC8 shRNA Plasmid (h): sc-97225-SH and BIRC8 shRNA (h) Lentiviral Particles: sc-97225-V.

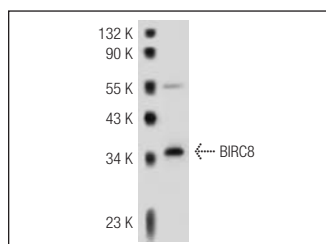
Molecular Weight of BIRC8: 27 kDa.

Positive Controls: MOLT-4 cell lysate: sc-2233.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



BIRC8 (C-16): sc-130107. Western blot analysis of BIRC8 expression in MOLT-4 whole cell lysate.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.