

BRD2 (h): 293T Lysate: sc-117289

BACKGROUND

The bromodomain-containing proteins include BRD2, BRD3, BRD4 and BRDT. BRD2 (RING3 protein) is a mitogen-activated nuclear protein whose gene is located in the human MHC II region, suggesting its relation to HLA-associated diseases. The gene encoding BRD3 (RING3-like protein) contains two bromodomains and maps to chromosome 9q34. BRD4 (HUNK1 protein) is a nuclear protein involved in the regulation of chromosomal dynamics during mitosis. The testis-specific bromodomain protein BRDT contains a PEST sequence, indicating that it undergoes rapid intracellular degradation. The bromodomain-containing proteins are ubiquitously expressed.

REFERENCES

1. Thorpe, K.L., et al. 1997. Chromosomal localization, gene structure and transcription pattern of the ORFX gene, a homologue of the MHC-linked RING3 gene. *Gene* 200: 177-183.
2. Zhou, M., et al. 2003. Expression of BRD7-interacting proteins, BRD2 and BRD3, in nasopharyngeal carcinoma tissues. *Ai Zheng* 22: 123-127.
3. Shang, E., et al. 2004. Identification of unique, differentiation stage-specific patterns of expression of the bromodomain-containing genes Brd2, Brd3, Brd4, and Brdt in the mouse testis. *Gene Expr. Patterns* 4: 513-519.
4. Boyer, A., et al. 2004. Pre-sertoli specific gene expression profiling reveals differential expression of Ppt1 and Brd3 genes within the mouse genital ridge at the time of sex determination. *Biol. Reprod.* 71: 820-827.
5. Trousdale, R.K., et al. 2004. Bromodomain containing 2 (BRD2) is expressed in distinct patterns during ovarian folliculogenesis independent of FSH or GDF9 action. *Mol. Reprod. Dev.* 68: 261-268.
6. Crowley, T., et al. 2004. Change in nuclear-cytoplasmic localization of a double-bromodomain protein during proliferation and differentiation of mouse spinal cord and dorsal root ganglia. *Brain Res. Dev. Brain Res.* 149: 93-101.
7. Kanno, T., et al. 2004. Selective recognition of acetylated histones by bromodomain proteins visualized in living cells. *Mol. Cell* 13: 33-43.
8. Sinha, A., et al. 2005. Bromodomain analysis of Brd2-dependent transcriptional activation of cyclin A. *Biochem. J.* 387: 257-269.

CHROMOSOMAL LOCATION

Genetic locus: BRD2 (human) mapping to 6p21.32.

PRODUCT

BRD2 (h): 293T Lysate represents a lysate of human BRD2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

BRD2 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive BRD2 antibodies. Recommended use: 10-20 µl per lane.

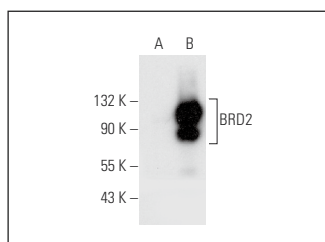
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

BRD2 (G-4): sc-393720 is recommended as a positive control antibody for Western Blot analysis of enhanced human BRD2 expression in BRD2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



BRD2 (G-4): sc-393720. Western blot analysis of BRD2 expression in non-transfected: sc-117752 (A) and human BRD2 transfected: sc-117289 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.