SANTA CRUZ BIOTECHNOLOGY, INC.

BRDT (H-32): sc-135208



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 2 bromodomains and the gene encoding for the protein 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 proteins are ubiquitously expressed.

REFERENCES

- 1. Jones, M.H., et al. 1997. Identification and characterization of BRDT: A testis-specific gene related to the bromodomain genes RING3 and Drosophila fsh. Genomics 45: 529-534.
- 2. Dhalluin, C., et al. 1999. Structure and ligand of a histone acetyltransferase bromodomain. Nature 399: 491-496.
- 3. Scanlan, M.J., et al. 2000. Expression of cancer-testis antigens in lung cancer: definition of bromodomain testis-specific gene (BRDT) as a new CT gene, CT9. Cancer Lett. 150: 155-164.
- 4. Pivot-Pajot, C., et al. 2003. Acetylation-dependent chromatin reorganization by BRDT, a testis-specific bromodomain-containing protein. Mol. Cell. Biol. 23: 5354-5365.
- 5. 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.
- 6. Zheng, Y., et al. 2005. Molecular cloning and expression of a novel alternative splice variant of BRDT gene. Int. J. Mol. Med. 15: 315-321.

CHROMOSOMAL LOCATION

Genetic locus: BRDT (human) mapping to 1p22.1; Brdt (mouse) mapping to 5 E5.

SOURCE

BRDT (H-32) is a rabbit polyclonal antibody raised against amino acids 820-851 mapping near the C-terminus of BRDT of human origin.

PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

RESEARCH USE

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

APPLICATIONS

BRDT (H-32) is recommended for detection of BRDT of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

BRDT (H-32) is also recommended for detection of BRDT in additional species, including equine and bovine.

Suitable for use as control antibody for BRDT siRNA (h): sc-60286, BRDT siRNA (m): sc-60287, BRDT shRNA Plasmid (h): sc-60286-SH, BRDT shRNA Plasmid (m): sc-60287-SH, BRDT shRNA (h) Lentiviral Particles: sc-60286-V and BRDT shRNA (m) Lentiviral Particles: sc-60287-V.

Molecular Weight of BRDT: 108 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

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 antirabbit 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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.





BRDT (H-32): sc-135208. Western blot analysis of BRDT expression in Jurkat whole cell lysate

PROTOCOLS

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

MONOS Try BRDT (B-11): sc-515674, our highly recommended Satisfation monoclonal alternative to BRDT (H-32). Guaranteed