

## BRDT (N-14): sc-47821

### 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 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 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of BRDT of human origin.

### PRODUCT

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

Blocking peptide available for competition studies, sc-47821 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### STORAGE

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

### APPLICATIONS

BRDT (N-14) is recommended for detection of BRDT of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for BRDT siRNA (h): sc-60286 and BRDT siRNA (m): sc-60287.

Molecular Weight of BRDT: 108 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### 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.



Try **BRDT (B-11): sc-515674**, our highly recommended monoclonal alternative to BRDT (N-14).