SANTA CRUZ BIOTECHNOLOGY, INC.

BRDT (C-20): sc-47819



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 bromo domains 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

- 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.
- Dhalluin, C., et al. 1999. Structure and ligand of a histone acetyltransferase bromodomain. Nature 399: 491-496.
- 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.
- Pivot-Pajot, C., et al. 2003. Acetylation-dependent chromatin reorganization by BRDT, a testis-specific bromodomain-containing protein. Mol. Cell. Biol. 23: 5354-5365.
- 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.
- 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.

SOURCE

BRDT (C-20) is an affinity purified goat polyclonal antibody raised against a peptide 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.

Blocking peptide available for competition studies, sc-47819 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 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 (C-20) is recommended for detection of BRDT of 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).

BRDT (C-20) is also recommended for detection of BRDT in additional species, including equine.

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

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) Immunofluo-rescence: 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.

PROTOCOLS

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