# SANTA CRUZ BIOTECHNOLOGY, INC.

# BRD3 (N-14): sc-46809



## 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 9q34.2. 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 bromodomaincontaining 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.

## CHROMOSOMAL LOCATION

Genetic locus: BRD3 (human) mapping to 9q34.2; Brd3 (mouse) mapping to 2 A3.

### SOURCE

BRD3 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BRD3 of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-46809 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# APPLICATIONS

BRD3 (N-14) is recommended for detection of BRD3 isoforms 1 and 2 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), immunohistochemistry (including paraffinembedded sections) (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 BRD3 siRNA (h): sc-60284, BRD3 siRNA (m): sc-60285, BRD3 shRNA Plasmid (h): sc-60284-SH, BRD3 shRNA Plasmid (m): sc-60285-SH, BRD3 shRNA (h) Lentiviral Particles: sc-60284-V and BRD3 shRNA (m) Lentiviral Particles: sc-60285-V.

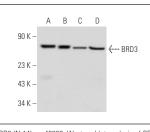
Molecular Weight of BRD3: 80 kDa.

Positive Controls: IMR-32 nuclear extract: sc-2148, A549 cell lysate: sc-2413 or HeLa nuclear extract: sc-2120.

#### **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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 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<sup>™</sup> Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz<sup>™</sup>: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA





BRD3 (N-14): sc-46809. Western blot analysis of BRD3 expression in IMR-32 (A) and HeLa (B) nuclear extracts and A549 (C) and U-2 OS (D) whole cell lysates.

BRD3 (N-14): sc-46809. Immunoperoxidase staining of formalin fixed, paraffin-embedded human bronchus tissue showing nuclear and cytoplasmic staining of respiratory epithelial cells.

### **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.

## PROTOCOLS

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

# MONOS Satisfation Guaranteed Try BRD3 (2088C3a): sc-81202, our highly recommended monoclonal alternative to BRD3 (N-14).

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