

# BRD9 (U-17): sc-102170

## BACKGROUND

The bromodomain is an approximately 70 amino acid region that is found in a variety of proteins and is thought to be involved in protein-protein interactions and transcriptional activation. BRD9 (Bromodomain-containing protein 9), also known as PRO9856 or LAVS3040, is a 501 amino acid protein that contains one bromodomain and may be involved in various protein interactions throughout the cell. The gene encoding BRD9 maps to chromosome 5 and is expressed as four isoforms due to alternative splicing events. With 181 million base pairs encoding around 1,000 genes, chromosome 5 comprises about 6% of human genomic DNA. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm on chromosome 5 is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

## REFERENCES

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3. South, S.T., et al. 2006. A new genomic mechanism leading to cri-du-chat syndrome. *Am. J. Med. Genet. A* 140: 2714-2720.
4. Aretz, S., et al. 2007. Somatic APC mosaicism: a frequent cause of familial adenomatous polyposis (FAP). *Hum. Mutat.* 28: 985-992.
5. Cleaver, J.E., et al. 2007. Cockayne syndrome exhibits dysregulation of p21 and other gene products that may be independent of transcription-coupled repair. *Neuroscience* 145: 1300-1308.
6. Du, H.Y., et al. 2007. Telomerase reverse transcriptase haploinsufficiency and telomere length in individuals with 5p- syndrome. *Aging Cell* 6: 689-697.
7. Herry, A., et al. 2007. Redefining monosomy 5 by molecular cytogenetics in 23 patients with MDS/AML. *Eur. J. Haematol.* 78: 457-467.
8. Kang, J.U., et al. 2008. Gain at chromosomal region 5p15.33, containing TERT, is the most frequent genetic event in early stages of non-small cell lung cancer. *Cancer Genet. Cytogenet.* 182: 1-11.
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## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## CHROMOSOMAL LOCATION

Genetic locus: BRD9 (human) mapping to 5p15.33; Brd9 (mouse) mapping to 13 C1.

## SOURCE

BRD9 (U-17) is a purified rabbit polyclonal antibody raised against BRD9 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

BRD9 (U-17) is recommended for detection of BRD9 of mouse, rat, human and dog 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for BRD9 siRNA (h): sc-91975, BRD9 siRNA (m): sc-141743, BRD9 shRNA Plasmid (h): sc-91975-SH, BRD9 shRNA Plasmid (m): sc-141743-SH, BRD9 shRNA (h) Lentiviral Particles: sc-91975-V and BRD9 shRNA (m) Lentiviral Particles: sc-141743-V.

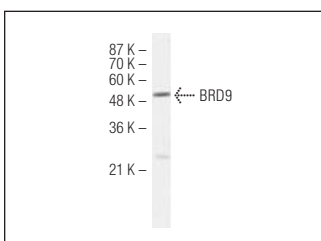
Molecular Weight of BRD9: 56 kDa.

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 anti-rabbit 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).

## DATA



BRD9 (U-17): sc-102170. Western blot analysis of BRD9 expression in Jurkat whole cell lysate.

## RESEARCH USE

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