PB1 (P-20): sc-82304



The Power to Question

BACKGROUND

PB1 (polybromo 1), also known as PBRM1 or BAF180, is a 1,689 amino acid protein that localizes to the nucleus and contains one HMG box DNA-binding domain, 2 BAH domains and 6 bromo domains. Expressed in a wide variety of tissues, PB1 functions as a component of the SWI/SNF-B (PBAF) chromatin-remodeling complex and, in conjunction with other proteins, is involved in the transcriptional activation or repression of target genes via the alternation of DNA-nucleosome topology. PB1 exists as nine alternatively spliced isoforms and, in response to DNA damage, may be phosphorylated by ATM or ATR. The gene encoding PB1 maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci.

REFERENCES

- Xue, Y., et al. 2000. The human SWI/SNF-B chromatin-remodeling complex is related to yeast Rsc and localizes at kinetochores of mitotic chromosomes. Proc. Natl. Acad. Sci. USA 97: 13015-13020.
- Horikawa, I., et al. 2002. cDNA cloning of the human polybromo-1 gene on chromosome 3p21. DNA Seq. 13: 211-215.
- 3. Wang, Z., et al. 2004. Polybromo protein BAF180 functions in mammalian cardiac chamber maturation. Genes Dev. 18: 3106-3116.
- Yan, Z., et al. 2005. PBAF chromatin-remodeling complex requires a novel specificity subunit, BAF200, to regulate expression of selective interferonresponsive genes. Genes Dev. 19: 1662-1667.
- 5. Sekine, I., et al. 2005. The 3p21 candidate tumor suppressor gene BAF180 is normally expressed in human lung cancer. Oncogene 24: 2735-2738.
- 6. Online Mendelian Inheritance in Man, OMIM™. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 606083. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Chandrasekaran, R., et al. 2007. Polybromo-1-bromodomains bind Histone H3 at specific acetyl-lysine positions. Biochem. Biophys. Res. Commun. 355: 661-666.

CHROMOSOMAL LOCATION

Genetic locus: PBRM1 (human) mapping to 3p21.1; Pbrm1 (mouse) mapping to 14 B.

SOURCE

PB1 (P-20) is available as either goat (sc-82304) or rabbit (sc-82304-R) polyclonal affinity purified antibody raised against a peptide mapping near the C-terminus of PB1 of human origin.

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 or our catalog for detailed protocols and support products.

PRODUCT

Each vial contains 200 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-82304 X, 200 μg /0.1 ml.

Blocking peptide available for competition studies, sc-82304 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PB1 (P-20) is recommended for detection of PB1 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).

PB1 (P-20) is also recommended for detection of PB1 in additional species, including equine, canine, bovine and avian.

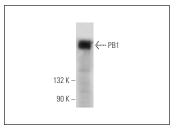
Suitable for use as control antibody for PB1 siRNA (h): sc-76075, PB1 siRNA (m): sc-76076, PB1 shRNA Plasmid (h): sc-76075-SH, PB1 shRNA Plasmid (m): sc-76076-SH, PB1 shRNA (h) Lentiviral Particles: sc-76075-V and PB1 shRNA (m) Lentiviral Particles: sc-76076-V.

PB1 (P-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of PB1: 180 kDa.

Positive Controls: mouse brain extract: sc-2253.

DATA



PB1 (P-20): sc-82304. Western blot analysis of PB1 expression in mouse brain tissue extract.

RESEARCH USE

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



Try **PB1 (D-8): sc-390095**, our highly recommended monoclonal aternative to PB1 (P-20).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**