

PB1 (D-8): sc-390095

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, two BAH domains and six 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.

CHROMOSOMAL LOCATION

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

SOURCE

PB1 (D-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 33-71 near the C-terminus of PB1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₃ kappa light chain 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-390095 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-390095 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

PB1 (D-8) is recommended for detection of PB1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 paraffin-embedded 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).

PB1 (D-8) 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 (D-8) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

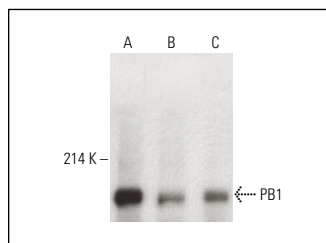
Molecular Weight of PB1: 180 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2285, MOLT-4 cell lysate: sc-2233 or Jurkat whole cell lysate: sc-2204.

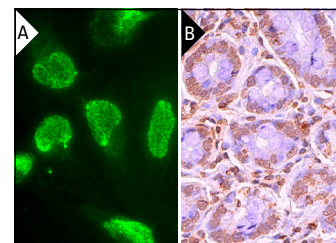
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



PB1 (D-8): sc-390095. Western blot analysis of PB1 expression in MOLT-4 (A), MIA PaCa-2 (B) and Jurkat (C) whole cell lysates. Detection reagent used: m-IgG₃ BP-HRP: sc-533670.



PB1 (D-8): sc-390095. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing nuclear staining of glandular cells and endothelial cells (B).

SELECT PRODUCT CITATIONS

1. Jamshidi, F., et al. 2016. The genomic landscape of epithelioid sarcoma cell lines and tumours. *J. Pathol.* 238: 63-73.
2. Pietrzak, J., et al. 2019. EP300-HDAC1-SWI/SNF functional unit defines transcription of some DNA repair enzymes during differentiation of human macrophages. *Biochim. Biophys. Acta Gene Regul. Mech.* 1862: 198-208.

STORAGE

Store at 4° C, **DO 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 for detailed protocols and support products.