BRD7 (B-8): sc-376180

**BACKGROUND**

BRD7 (bromodomain containing protein 7), also known as BP75 (75 kDa bromodomain protein), NAG4 or CELTIX1, is a 651 amino acid transcription regulation factor that contains one bromodomain and is expressed in liver, pancreas, intestines, kidney and cerebellum. Localizing to the nucleus, BRD7 plays an important role in cell cycle progression, signal-dependent gene expression and cell growth. BRD7 functions as a tumor suppressor, as is suggested by its apparent suppressive role on nasopharyngeal carcinoma (NPC) cell growth when overexpressed. Specifically, BRD7 negatively regulates the expression of cell cycle related proteins such as cyclin D1 and E2F-3, thereby inhibiting the G1-S progression. BRD7 also interacts with the centrosome associated protein BLOS2 and this BRD7-BLOS2 interaction inhibits the transcriptional suppression activity of BRD7 on various target genes.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: BRD7 (human) mapping to 16q12.1; Brd7 (mouse) mapping to 8 C3.

**SOURCE**

BRD7 (B-8) is a mouse monoclonal antibody raised against amino acids 397-473 mapping within an internal region of BRD7 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2κ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

BRD7 (B-8) is available conjugated to agarose (sc-376180 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376180 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376180 PE), fluorescein (sc-376180 FITC), Alexa Fluor® 488 (sc-376180 AF488), Alexa Fluor® 546 (sc-376180 AF546), Alexa Fluor® 594 (sc-376180 AF594) or Alexa Fluor® 647 (sc-376180 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376180 AF680) or Alexa Fluor® 790 (sc-376180 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

**APPLICATIONS**

BRD7 (B-8) is recommended for detection of BRD7 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for BRD7 siRNA (h): sc-92998, BRD7 siRNA (m): sc-141741, BRD7 shRNA Plasmid (h): sc-92998-SH, BRD7 shRNA Plasmid (m): sc-141741-Sh, BRD7 shRNA (h) Lentiviral Particles: sc-92998-V and BRD7 shRNA (m) Lentiviral Particles: sc-141741-V. Molecular Weight of BRD7: 75 kDa.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG BP-HRP: sc-516102 or m-IgG BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:100-1:10000), 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), Immunofluorescence: use m-IgG BP-FITC: sc-516140 or m-IgG BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

BRD7 (B-8): sc-376180. Western blot analysis of BRD7 expression in Jurkat (A), U-698-M (B), K-562 (C), NIH/3T3 (D) and F9 (E) whole cell lysates.

BRD7 (B-8): sc-376180. Immunofluorescence staining of formalin-fixed A-431 cells showing nuclear and cytoplasmic localization.

**SELECT PRODUCT CITATIONS**


**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.