

BRD8 (E-20): sc-162575

BACKGROUND

BRD8 (bromodomain containing protein 8), also designated skeletal muscle abundant protein (SMAP or SMAP2) or thyroid hormone receptor coactivating protein 120 kDa (p120 or TrCP120), is a 1,235 amino acid transcription regulation factor that contains two bromodomains and is expressed in adipose tissue, brain, heart, kidney, liver, lung, pancreas, placenta and skeletal muscle. BRD8 mRNA is upregulated during neointima formation in a rat carotid endarterectomy model and may therefore be involved in the progression of atherosclerosis in aorta. BRD8 is a member of the NuA4 histone acetyltransferase complex, which may be responsible for the activation of transcriptional programs associated with oncogene and proto-oncogene mediated growth induction, tumor suppressor mediated growth arrest and replicative senescence, apoptosis and DNA repair.

REFERENCES

- Nielsen, M.S., Petersen, C.M., Gliemann, J. and Madsen, P. 1996. Cloning and sequencing of a human cDNA encoding a putative transcription factor containing a bromodomain. *Biochim. Biophys. Acta* 1306: 14-16.
- Monden, T., Wondisford, F.E. and Hollenberg, A.N. 1997. Isolation and characterization of a novel ligand-dependent thyroid hormone receptor-coactivating protein. *J. Biol. Chem.* 272: 29834-29841.
- Monden, T., Kishi, M., Hosoya, T., Satoh, T., Wondisford, F.E., Hollenberg, A.N., Yamada, M. and Mori, M. 1999. p120 acts as a specific coactivator for 9-*cis*-retinoic acid receptor (RXR) on peroxisome proliferator-activated receptor- γ /RXR heterodimers. *Mol. Endocrinol.* 13: 1695-1703.
- Nishimoto, S., Hamajima, Y., Toda, Y., Toyoda, H., Kitamura, K. and Komurasaki, T. 2002. Identification of a novel smooth muscle associated protein, Smap2, upregulated during neointima formation in a rat carotid endarterectomy model. *Biochim. Biophys. Acta* 1576: 225-230.
- Cai, Y., Jin, J., Tomomori-Sato, C., Sato, S., Sorokina, I., Parmely, T.J., Conaway, R.C. and Conaway, J.W. 2003. Identification of new subunits of the multiprotein mammalian TRRAP/TIP60-containing histone acetyltransferase complex. *J. Biol. Chem.* 278: 42733-42736.
- Doyon, Y. and Côte, J. 2004. The highly conserved and multifunctional NuA4 HAT complex. *Curr. Opin. Genet. Dev.* 14: 147-154.
- Doyon, Y., Selleck, W., Lane, W.S., Tan, S. and Côte, J. 2004. Structural and functional conservation of the NuA4 histone acetyltransferase complex from yeast to humans. *Mol. Cell. Biol.* 24: 1884-1896.

CHROMOSOMAL LOCATION

Genetic locus: BRD8 (human) mapping to 5q31.2; Brd8 (mouse) mapping to 18 B1.

SOURCE

BRD8 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BRD8 of human origin.

RESEARCH USE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-162575 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BRD8 (E-20) is recommended for detection of BRD8 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other BRD family members.

BRD8 (E-20) is also recommended for detection of BRD8 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for BRD8 siRNA (h): sc-92032, BRD8 siRNA (m): sc-141742, BRD8 shRNA Plasmid (h): sc-92032-SH, BRD8 shRNA Plasmid (m): sc-141742-SH, BRD8 shRNA (h) Lentiviral Particles: sc-92032-V and BRD8 shRNA (m) Lentiviral Particles: sc-141742-V.

Molecular Weight of BRD8: 135/103/81/94 kDa.

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™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) 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™ Mounting Medium: sc-24941.

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.