

PRIP (C-20): sc-49086

BACKGROUND

Peroxisome proliferator-activated receptor-interacting protein (PRIP), also designated nuclear receptor co-activator 6, is related to Phospholipase C, but is catalytically inactive on its own. It acts as a nuclear receptor co-activator by binding directly to nuclear receptors and stimulating their transcriptional activities in a hormone-dependent manner. PRIP is an ubiquitously expressed protein with highest expression in ovary, brain, testis and prostate. It interacts with PRIP-interacting protein with methyltransferase activity (PIMT). They serve as liaisons between cAMP response element-binding protein-binding protein (CBP) and PPAR γ -binding protein-anchored (PBP) co-activator complexes, which are involved in the transcriptional activity of nuclear receptors. PRIP also plays an important role in controlling the action of GABA_A receptor phosphorylation by inhibiting phosphatase PP1, thereby mediating the action of synaptic inhibition that is controlled by these receptors.

REFERENCES

- Schellenberg, G.D., Anderson, L., O'dahl, S., Wisjman, E.M., Sadovnick, A.D., Ball, M.J., Larson, E.B., Kukull, W.A., Martin, G.M. and Roses, A.D. 1991. APP717, APP693 and PRIP gene mutations are rare in Alzheimer disease. *Am. J. Hum. Genet.* 49: 511-517.
- Maundrell, K. 1993. Thiamine-repressible expression vectors pREP and pRIP for fission yeast. *Gene* 123: 127-130.
- Zhu, Y., Kan, L., Qi, C., Kanwar, Y.S., Yeldandi, A.V., Rao, M.S. and Reddy, J.K. 2000. Isolation and characterization of peroxisome proliferator-activated receptor (PPAR) interacting protein (PRIP) as a co-activator for PPAR. *J. Biol. Chem.* 275: 13510-13516.
- Zhu, Y., Qi, C., Cao, W.Q., Yeldandi, A.V., Rao, M.S. and Reddy, J.K. 2001. Cloning and characterization of PIMT, a protein with a methyltransferase domain, which interacts with and enhances nuclear receptor co-activator PRIP function. *Proc. Natl. Acad. Sci. USA* 98: 10380-10385.
- Enünlü, I., Pápai, G., Cserpán, I., Udvardy, A., Jeang, K.T. and Boros, I. 2003. Different isoforms of PRIP-interacting protein with methyltransferase domain/trimethylguanosine synthase localizes to the cytoplasm and nucleus. *Biochem. Biophys. Res. Commun.* 309: 44-51.
- Kanematsu, T. and Hirata, M. 2003. PRIP-1 involved in GABA_A receptor trafficking. *Seikagaku* 75: 378-382.
- Zhu, Y.J., Crawford, S.E., Stellmach, V., Dwivedi, R.S., Rao, M.S., Gonzalez, F.J., Qi, C. and Reddy, J.K. 2003. Co-activator PRIP, the peroxisome proliferator-activated receptor-interacting protein, is a modulator of placental, cardiac, hepatic and embryonic development. *J. Biol. Chem.* 278: 1986-1990.

CHROMOSOMAL LOCATION

Genetic locus: NCOA6 (human) mapping to 20q11.22; Ncoa6 (mouse) mapping to 2 H1.

SOURCE

PRIP (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PRIP of human origin.

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-49086 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-49086 X, 200 μ g/0.1 ml.

APPLICATIONS

PRIP (C-20) is recommended for detection of PRIP 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).

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

Suitable for use as control antibody for PRIP siRNA (h): sc-61401, PRIP siRNA (m): sc-61402, PRIP shRNA Plasmid (h): sc-61401-SH, PRIP shRNA Plasmid (m): sc-61402-SH, PRIP shRNA (h) Lentiviral Particles: sc-61401-V and PRIP shRNA (m) Lentiviral Particles: sc-61402-V.

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

Molecular Weight of PRIP: 250 kDa.

Positive Controls: HeLa nuclear extract: sc-2120.

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.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.