SANTA CRUZ BIOTECHNOLOGY, INC.

PRIP (S-20): sc-49088

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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

1. 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.
2. Maundrell, K. 1993. Thiamine-repressible expression vectors pREP and pRIP for fission yeast. Gene 123: 127-130.
3. 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.
4. 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.
5. 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.
6. Kanematsu, T. and Hirata, M. 2003. PRIP-1 involved in $GABA_A$ receptor trafficking. Seikagaku 75: 378-382.
7. 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 (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PRIP of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-49088 P, (100 µg 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-49088 X, 200 µg/0.1 ml.

APPLICATIONS

PRIP (S-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 (S-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 (S-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.