SANTA CRUZ BIOTECHNOLOGY, INC.

PRIP (39-Q): sc-101129

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 a 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 PPARγ-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., et al. 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., et al. 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., et al. 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., et al. 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., et al. 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.

SOURCE

PRIP (39-Q) is a mouse monoclonal antibody raised against recombinant PRIP of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

PRIP (39-Q) is recommended for detection of PRIP of human origin by Western Blotting (starting dilution 1:200, 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 PRIP siRNA (h): sc-61401, PRIP shRNA Plasmid (h): sc-61401-SH and PRIP shRNA (h) Lentiviral Particles: sc-61401-V.

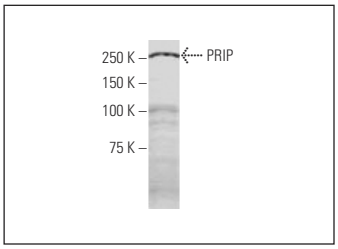
Molecular Weight of PRIP: 250 kDa.

Positive Controls: HeLa nuclear extract: sc-2120.

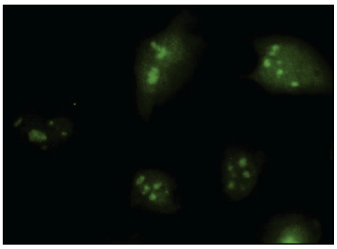
RECOMMENDED SUPPORT REAGENTS

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.

DATA



PRIP (39-Q): sc-101129. Western blot analysis of PRIP expression in HeLa nuclear extract.



PRIP (39-Q): sc-101129. Immunofluorescence staining of paraformaldehyde-fixed HeLa cells showing nuclear localization.

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 for detailed protocols and support products.