

PRIP (E-12): sc-515547

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 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., et al. 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., 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.
- 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.
- 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.

CHROMOSOMAL LOCATION

Genetic locus: NCOA6 (human) mapping to 20q11.22.

SOURCE

PRIP (E-12) is a mouse monoclonal antibody raised against amino acids 1814-2045 mapping near the C-terminus of PRIP of human origin.

PRODUCT

Each vial contains 200 μ g IgG $_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PRIP (E-12) is available conjugated to agarose (sc-515547 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515547 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515547 PE), fluorescein (sc-515547 FITC), Alexa Fluor $^{\circledR}$ 488 (sc-515547 AF488), Alexa Fluor $^{\circledR}$ 546 (sc-515547 AF546), Alexa Fluor $^{\circledR}$ 594 (sc-515547 AF594) or Alexa Fluor $^{\circledR}$ 647 (sc-515547 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor $^{\circledR}$ 680 (sc-515547 AF680) or Alexa Fluor $^{\circledR}$ 790 (sc-515547 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

PRIP (E-12) is recommended for detection of PRIP of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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.

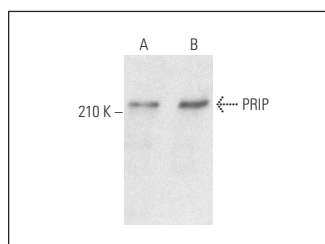
Molecular Weight of PRIP: 250 kDa.

Positive Controls: SK-N-MC cell lysate: sc-2237 or PC-3 cell lysate: sc-2220.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker $^{\text{TM}}$ Molecular Weight Standards: sc-2035, UltraCruz $^{\circledR}$ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz $^{\circledR}$ Mounting Medium: sc-24941 or UltraCruz $^{\circledR}$ Hard-set Mounting Medium: sc-359850.

DATA



PRIP (E-12): sc-515547. Western blot analysis of PRIP expression in SK-N-MC (A) and PC-3 (B) whole cell lysates.

STORAGE

Store at 4 $^{\circ}$ 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 for detailed protocols and support products.

Alexa Fluor $^{\circledR}$ is a trademark of Molecular Probes, Inc., Oregon, USA