

LPPR2 (W-24): sc-133759

BACKGROUND

Phosphatidate phosphatases are a family of integral membrane glycoproteins that dephosphorylate a variety of lipid phosphates and play a role in signal transduction via the phospholipase D pathway. PAP-2 proteins function independently of Mg^{2+} and are insensitive to NEM (N-ethylmaleimide) inhibition. The lipid phosphates degraded by this family include ceramide 1-phosphate (C1P), sphingosine 1-phosphate (S1P), phosphatidic acid (PA) and lysophosphatidic acid (LPA). LPPR2 (lipid phosphate phosphatase-related protein type 2), also known as PRG4 (plasticity-related gene 4 protein), is a 343 amino acid multi-pass membrane protein that mediates lipid phosphate phosphatase activity and may be involved in mechanisms of neuronal plasticity. There are two isoforms of LPPR2 that are produced as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: LPPR2 (human) mapping to 19p13.2; BC018242 (mouse) mapping to 9 A3.

SOURCE

LPPR2 (W-24) is an affinity purified rabbit polyclonal antibody raised against synthetic LPPR2 peptide of human origin.

PRODUCT

Each vial contains 50 μ g IgG in 500 μ l PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

LPPR2 (W-24) is recommended for detection of LPPR2 of human origin, BC018242 of mouse origin and the corresponding rat homolog by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with LPPR3 or LPPR4.

Suitable for use as control antibody for LPPR2 siRNA (h): sc-97689, BC018242 siRNA (m): sc-141514, LPPR2 shRNA Plasmid (h): sc-97689-SH, BC018242 shRNA Plasmid (m): sc-141514-SH, LPPR2 shRNA (h) Lentiviral Particles: sc-97689-V and BC018242 shRNA (m) Lentiviral Particles: sc-141514-V.

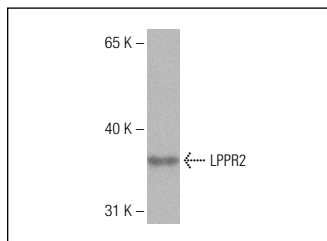
Molecular Weight of LPPR2: 37 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



LPPR2 (W-24): sc-133759. Western blot analysis of LPPR2 expression in HeLa whole cell lysate.

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.