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PCP-2 (m2): 293T Lysate: sc-122438

BACKGROUND

Purkinje cells are densely branching neurons characteristic of the cerebellar cortex. Purkinje cell protein-2 (PCP-2 or L7) is a G protein-regulator abundant in Purkinje cells and retinal bipolar neurons. PCP-2 belongs to a family of proteins containing a GoLoco or GPR (G protein-regulatory) motif named for the $G_{i/o}$ interacting protein Loco, the *Drosophila* RGS12 homologue. PCP-2 protein interacts with $G_{\alpha i/o}$ family of G proteins to inhibit GDP release. This indicates that the co-localization and association of $G_{\alpha i/o}$ and PCP-2 in cerebellum may play a functional role in regions of synaptic activity, as well as neural differentiation. The Purkinje type calcium channels may be physiological effectors of PCP-2 because they are the major voltage-dependent channels that modulate cell output and they are regulated by $G_{i/o}$ proteins. PCP-2 is only detected in higher vertebrates, suggesting that it may be a marker of more recent evolutionary development of cerebellar Purkinje cells.

REFERENCES

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STORAGE

Store at $-20^{\circ}C$. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

CHROMOSOMAL LOCATION

Genetic locus: *Pcp2* (mouse) mapping to 8 A1.1.

PRODUCT

PCP-2 (m2): 293T Lysate represents a lysate of mouse PCP-2 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

PCP-2 (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive PCP-2 antibodies. Recommended use: 10-20 μ l per lane.

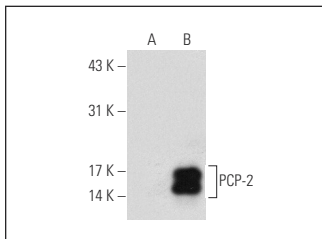
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PCP-2 (F-3): sc-137064 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse PCP-2 expression in PCP-2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



PCP-2 (F-3): sc-137064. Western blot analysis of PCP-2 expression in non-transfected: sc-117752 (A) and mouse PCP-2 transfected: sc-122438 (B) 293T whole cell lysates.

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.