



**SZABO  
SCANDIC**

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

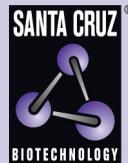
[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](http://linkedin.com/company/szaboscandic)



# PCP-2 (m): 293T Lysate: sc-122437



## 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

1. Redd, K.J., Oberdick, J., McCoy, J., Denker, B.M. and Luo, Y. 2002. Association and co-localization of G protein  $\alpha$ -subunits and Purkinje cell protein-2 (PCP-2) in mammalian cerebellum. *J. Neurosci. Res.* 70: 631-637.
2. Zhang, X., Zhang, H. and Oberdick, J. 2002. Conservation of the developmentally regulated dendritic localization of a Purkinje cell-specific mRNA that encodes a G protein modulator: comparison of rodent and human L7/PCP-2 gene structure and expression. *Brain Res. Mol. Brain Res.* 105: 1-10.
3. Kinoshita-Kawada, M., Oberdick, J. and Xi Zhu, M. 2004. A Purkinje cell-specific GoLoco domain protein, L7/PCP-2, modulates receptor-mediated inhibition of Cav2.1  $\text{Ca}^{2+}$  channels in a dose-dependent manner. *Brain Res. Mol. Brain Res.* 132: 73-86.
4. Rong, Y., Wang, T. and Morgan, J.I. 2004. Identification of candidate Purkinje cell-specific markers by gene expression profiling in wild-type and pcd(3J) mice. *Brain Res. Mol. Brain Res.* 132: 128-145.
5. Goswami, J., Martin, L.A., Goldowitz, D., Beitz, A.J. and Feddersen, R.M. 2005. Enhanced Purkinje cell survival but compromised cerebellar function in targeted anti-apoptotic protein transgenic mice. *Mol. Cell. Neurosci.* 29: 202-221.
6. Guan, J., Luo, Y. and Denker, B.M. 2005. Purkinje cell protein-2 (PCP-2) stimulates differentiation in PC-12 cells by  $G_{\beta\gamma}$ -mediated activation of Ras and p38 MAPK. *Biochem. J.* 392: 389-397.
7. Saito, H., Tsumura, H., Otake, S., Nishida, A., Furukawa, T. and Suzuki, N. 2005. L7/PCP-2-specific expression of Cre recombinase using knock-in approach. *Biochem. Biophys. Res. Commun.* 331: 1216-1221.
8. Simons, M.J. and Pellionisz, A.J. 2006. Genomics, morphogenesis and biophysics: triangulation of Purkinje cell development. *Cerebellum* 5: 27-35.
9. Wang, T., Parris, J., Li, L. and Morgan, J.I. 2006. The carboxypeptidase-like substrate-binding site in Nna1 is essential for the rescue of the Purkinje cell degeneration (pcd) phenotype. *Mol. Cell Neurosci.* 33: 200-213.

## CHROMOSOMAL LOCATION

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

## PRODUCT

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

## APPLICATIONS

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

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

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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](http://www.scbt.com) for detailed protocols and support products.