



**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)



# PTP $\rho$ (m): 293T Lysate: sc-179388

## BACKGROUND

Protein tyrosine phosphatases, or PTPs, are type I transmembrane proteins, membrane associated proteins or proteins localized in nuclei. Examples of transmembrane PTPs are LAR, PTP $\alpha$ , PTP $\beta$ , PTP $\gamma$ , PTP $\delta$ , PTP $\epsilon$ , PTP $\zeta$ , PTP $\kappa$ , PTP $\mu$  and PTP $\rho$ . Transmembrane PTPs play diverse roles in a variety of cellular processes during development and in adult tissues. PTP $\rho$ , also known as PTPRT, RPTPT or RPTP $\rho$ , is a receptor-type PTP (RPTP) containing a transmembrane region, two intracellular tandem catalytic domains, an extracellular region with Ig-like and Fibronectin type III-like repeats and a MAM (meprin-A5 antigen-PTP $\mu$ ) domain. RPTPs participate in neurite extension, signal transduction and cell adhesion. PTP $\rho$  is expressed at high levels in the central nervous system of both developing and adult tissues. It interacts with a variety of proteins that function at intercellular adheren junctions and it specifically binds and dephosphorylates E-cadherin.

## REFERENCES

1. McAndrew, P.E., Frostholm, A., White, R.A., Rotter, A. and Burghes, A.H. 1998. Identification and characterization of RPTP $\rho$ , a novel RPTP $\mu/\kappa$ -like receptor protein tyrosine phosphatase whose expression is restricted to the central nervous system. *Brain Res. Mol. Brain Res.* 56: 9-21.
2. Johnson, K.G. and Holt, C.E. 2000. Expression of CRYP- $\alpha$ , LAR, PTP- $\delta$ , and PTP $\rho$  in the developing *Xenopus* visual system. *Mech. Dev.* 92: 291-294.
3. Besco, J.A., Frostholm, A., Popesco, M.C., Burghes, A.H. and Rotter, A. 2001. Genomic organization and alternative splicing of the human and mouse RPTP $\rho$  genes. *BMC Genomics* 2: 1.
4. Johnson, K.G., McKinnell, I.W., Stoker, A.W. and Holt, C.E. 2001. Receptor protein tyrosine phosphatases regulate retinal ganglion cell axon outgrowth in the developing *Xenopus* visual system. *J. Neurobiol.* 49: 99-117.
5. Besco, J., Popesco, M.C., Davuluri, R.V., Frostholm, A. and Rotter, A. 2004. Genomic structure and alternative splicing of murine R2B receptor protein tyrosine phosphatases (PTP $\kappa$ ,  $\mu$ ,  $\rho$  and PCP-2). *BMC Genomics* 5: 14.
6. Yan, H.X., Yang, W., Zhang, R., Chen, L., Tang, L., Zhai, B., Liu, S.Q., Cao, H.F., Man, X.B., Wu, H.P., Wu, M.C. and Wang, H.Y. 2006. Protein-tyrosine phosphatase PCP-2 inhibits  $\beta$ -catenin signaling and increases E-cadherin-dependent cell adhesion. *J. Biol. Chem.* 281: 15423-15433.
7. Besco, J.A., Hooft van Huijsduijnen, R., Frostholm, A. and Rotter, A. 2006. Intracellular substrates of brain-enriched receptor protein tyrosine phosphatase  $\rho$  (RPTP $\rho$ /PTPRT). *Brain Res.* 1116: 50-57.

## CHROMOSOMAL LOCATION

Genetic locus: Ptprt (mouse) mapping to 2 H2.

## PRODUCT

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

## 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.

## APPLICATIONS

PTP $\rho$  (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive PTP $\rho$  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.

## 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.