



# SZABO SCANDIC

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## Produktinformation



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Diagnostik & molekulare Diagnostik



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### 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](https://www.linkedin.com/company/szaboscandic) 

# Pcdha10 (m): 293 Lysate: sc-179301

## BACKGROUND

Protocadherins are a large family of cadherin-like cell adhesion proteins that are involved in the establishment and maintenance of neuronal connections in the brain. There are three protocadherin gene clusters, designated  $\alpha$ ,  $\beta$  and  $\gamma$ , all of which contain multiple tandemly arranged genes. These genes generate thousands of different protocadherin proteins through alternative promoter usage and *cis*-alternative splicing. PCDHA and PCDHG family members form oligomers, which also increases the diversity of PCDH proteins at the cell surface. All three gene clusters, PCDHA, PCDHB, and PCDHG show upregulated expression during brain development, and PCDHA is subsequently downregulated by myelination. Expression of all three clusters continues in the olfactory bulb, hippocampus and cerebellum until adulthood. Members of the PCDH family are potential targets in schizophrenia and bipolar disorder pathogenesis. PCDHA10 produces at least three isoforms by alternative splicing.

## REFERENCES

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2. Vanhalst, K., Kools, P., Vanden Eynde, E. and van Roy, F. 2001. The human and murine protocadherin- $\beta$  one-exon gene families show high evolutionary conservation, despite the difference in gene number. *FEBS Lett.* 495: 120-125.
3. Morgan, M. 2008. Models for the recent evolution of protocadherin gene clusters. *BioCell* 32: 9-26.
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5. Lachman, H.M., Petruolo, O.A., Pedrosa, E., Novak, T., Nolan, K. and Stopkova, P. 2008. Analysis of protocadherin alpha gene deletion variant in bipolar disorder and schizophrenia. *Psychiatr. Genet.* 18: 110-115.
6. Pedrosa, E., Stefanescu, R., Margolis, B., Petruolo, O., Lo, Y., Nolan, K., Novak, T., Stopkova, P. and Lachman, H.M. 2008. Analysis of protocadherin  $\alpha$  gene enhancer polymorphism in bipolar disorder and schizophrenia. *Schizophr. Res.* 102: 210-219.

## CHROMOSOMAL LOCATION

Genetic locus: Pcdha10 (mouse) mapping to 18 B3.

## PRODUCT

Pcdha10 (m): 293 Lysate represents a lysate of mouse Pcdha10 transfected 293 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

Pcdha10 (m): 293 Lysate is suitable as a Western Blotting positive control for mouse reactive Pcdha10 antibodies. Recommended use: 10-20  $\mu$ l per lane.

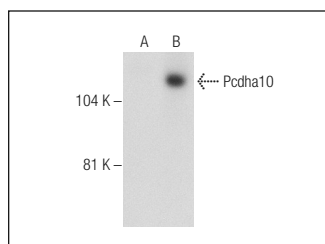
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

PCDHAC (2C1/E7): sc-130555 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Pcdha10 expression in Pcdha10 transfected 293 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 $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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



PCDHAC (2C1/E7): sc-130555. Western blot analysis of Pcdha10 expression in non-transfected: sc-110760 (A) and mouse Pcdha10 transfected: sc-179301 (B) 293 whole cell lysates.

## 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.