# PCDH11Y (h): 293T Lysate: sc-174274



The Power to Question

# **BACKGROUND**

Protocadherins (PCDHs) are a subfamily of cadherins, a large group of related glycoproteins that mediate calcium-dependent cell-cell adhesion via a homophilic mechanism. Involved in a variety of functions, protocadherins help to regulate neural development and synapse formation. PCDH11Y (protocadherin 11 Y-linked), also known as PCDHY (protocadherin on the Y chromosome), PCDH22 or PCDH-PC (protocadherin prostate cancer), is a 1,340 amino acid single-pass type I membrane protein and probable calcium-dependent cell-adhesion protein that is encoded by a gene that maps to human chromosome Yp11.2. A member of the cadherin super family and highly expressed in brain, PCDH11Y is also found at lower levels in testis and apoptosis-resistant cells. PCDH11Y contains seven cadherin domains and exists as four alternatively spliced isoforms.

# **REFERENCES**

- Mumm, S., et al. 1997. Evolutionary features of the 4-Mb Xq21.3 XY homology region revealed by a map at 60-kb resolution. Genome Res. 7: 307-314
- 2. Schwartz, A., et al. 1998. Reconstructing hominid Y evolution: X-homologous block, created by X-Y transposition, was disrupted by Yp inversion through LINE-LINE recombination. Hum. Mol. Genet. 7: 1-11.
- Ciccodicola, A., et al. 2000. Differentially regulated and evolved genes in the fully sequenced Xq/Yq pseudoautosomal region. Hum. Mol. Genet. 9: 395-401.
- Blanco, P., et al. 2000. Conservation of PCDHX in mammals; expression of human X/Y genes predominantly in brain. Mamm. Genome 11: 906-914.
- Tilford, C.A., et al. 2001. A physical map of the human Y chromosome. Nature 409: 943-945.
- Chen, M.W., et al. 2002. The emergence of protocadherin-PC expression during the acquisition of apoptosis-resistance by prostate cancer cells. Oncogene 21: 7861-7871.
- 7. Yang, X., et al. 2005. A human- and male-specific protocadherin that acts through the wnt signaling pathway to induce neuroendocrine transdifferentiation of prostate cancer cells. Cancer Res. 65: 5263-5271.
- 8. Jobling, M.A., et al. 2007. Structural variation on the short arm of the human Y chromosome: recurrent multigene deletions encompassing Amelogenin Y. Hum. Mol. Genet. 16: 307-316.
- 9. Online Mendelian Inheritance in Man, OMIM™. 2010. Johns Hopkins University, Baltimore, MD. MIM Number: 400022. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

# **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.

# **PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

# **CHROMOSOMAL LOCATION**

Genetic locus: PCDH11Y (human) mapping to Yp11.2.

#### **PRODUCT**

PCDH11Y (h): 293T Lysate represents a lysate of human PCDH11Y transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

# **APPLICATIONS**

PCDH11Y (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive PCDH11Y antibodies. Recommended use: 10-20  $\mu$ l per lane.

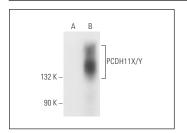
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PCDH11X/Y (D-2): sc-514085 is recommended as a positive control antibody for Western Blot analysis of enhanced human PCDH11Y expression in PCDH11Y 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-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

# **DATA**



PCDH11X/Y (D-2): sc-514085. Western blot analysis of PCDH11X/Y expression in non-transfected: sc-117752 (A) and human PCDH11Y transfected: sc-174274 (B) 293T whole cell lysates.

# **RESEARCH USE**

For research use only, not for use in diagnostic procedures.