# PL6 (h): 293 Lysate: sc-111005



The Power to Question

### **BACKGROUND**

Transmembrane proteins contain transmembrane domains that are usually characterized by  $\alpha$ -helical structures. Transmembrane proteins exist as thermodynamically stable hetero- and homodimers that interact with the lipid bilayer and are involved in both material exchange and communication between the cell and the environment. PL6, also referred to as TMEM115 (transmembrane protein 115) or PP6 (placental protein 6), is a 351 amino acid multi-pass membrane protein that is highly expressed in kidney and skeletal muscle with lower levels of expression detected in liver, placenta, prancreas, lung, heart and brain. PL6 contains one phosphoserine residue and several transmembrane domains, suggesting that it may participate in protein exchange and signaling events between cells.

## **REFERENCES**

- Popot, J.L. and Engelman, D.M. 1990. Membrane protein folding and oligomerization: the two-stage model. Biochemistry 29: 4031-4037.
- Adamian, L. and Liang, J. 2001. Helix-helix packing and interfacial pairwise interactions of residues in membrane proteins. J. Mol. Biol. 311: 891-907.
- Engelman, D.M., Chen, Y., Chin, C.N., Curran, A.R., Dixon, A.M., Dupuy, A.D., Lee, A.S., Lehnert, U., Matthews, E.E., Reshetnyak, Y.K., Senes, A. and Popot, J.L. 2003. Membrane protein folding: beyond the two stage model. FEBS Lett. 555: 122-125.
- Stevens, T.J., Mizuguchi, K. and Arkin, I.T. 2004. Distinct protein interfaces in transmembrane domains suggest an *in vivo* folding model. Protein Sci. 13: 3028-3037.
- Freeman-Cook, L.L. and Dimaio, D. 2005. Modulation of cell function by small transmembrane proteins modeled on the bovine papillomavirus E5 protein. Oncogene 24: 7756-7762.
- Cao, B., Porollo, A., Adamczak, R., Jarrell, M. and Meller, J. 2006. Enhanced recognition of protein transmembrane domains with prediction-based structural profiles. Bioinformatics 22: 303-309.
- SWISS-PROT/TrEMBL (Q12893). World Wide Web URL: http://www.expasy. ch/sprot/sprot-top.html

## CHROMOSOMAL LOCATION

Genetic locus: TMEM115 (human) mapping to 3p21.31.

## **PRODUCT**

PL6 (h): 293 Lysate represents a lysate of human PL6 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.

# **PROTOCOLS**

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

#### **APPLICATIONS**

PL6 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive PL6 antibodies. Recommended use:  $10-20~\mu$ l per lane.

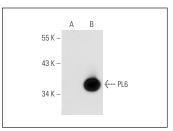
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

PL6 (38-K): sc-100652 is recommended as a positive control antibody for Western Blot analysis of enhanced human PL6 expression in PL6 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-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<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## **DATA**



PL6 (38-K): sc-100652. Western blot analysis of PL6 expression in non-transfected: sc-117752 (**A**) and human PL6 transfected: sc-111005 (**B**) 293T whole

## **RESEARCH USE**

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

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