

PDZK1 (m): 293T Lysate: sc-122475

BACKGROUND

Proteins containing PDZ domains play a role in a wide array of biological functions including protein scaffolding, organization of ion channels, and signal transduction. The PDZ domain containing protein PDZK1 interacts with multiple targets, including MAP17 and cMOAT and also NaPi-IIa, which implicates PDZK1 in ion channel formation. PDZK1 localizes to the plasma membrane of epithelial cells, where it is able to interact simultaneously with more than one type of channel, by utilizing its four PDZ domains, and thus acts as an adaptor between different cell surface receptors. Furthermore, PDZK1 is markedly upregulated in human carcinomas of epithelial origin, and the cluster formed by its association with cMOAT and MAP17 may potentially play role in multidrug resistance. Therefore, PDZK1 may be a new target for cancers cells resistance to chemotherapeutic agents.

REFERENCES

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2. Kocher, O., Pal R, Roberts M, Cirovic C, Gilchrist A. 2003. Targeted disruption of the PDZK1 gene by homologous recombination. *Mol. Cell. Biol.* 23: 1175-1180.
3. Gisler, S.M., Pribanic, S., Bacic, D., Forrer, P., Gantenbein, A., Sabourin, L.A., Tsuji, A., Zhao, Z.S., Manser, E., Biber, J. and Murer, H. 2003. PDZK1: I. a major scaffold in brush borders of proximal tubular cells. *Kidney Int.* 64: 1733-1745.
4. Gentzsch, M., Cui, L., Mengos, A., Chang, X.B., Chen, J.H. and Riordan, J.R. 2003. The PDZ-binding chloride channel CIC-3B localizes to the Golgi and associates with cystic fibrosis transmembrane conductance regulator-interacting PDZ proteins. *J. Biol. Chem.* 278: 6440-6449.

CHROMOSOMAL LOCATION

Genetic locus: Pdzk1 (mouse) mapping to 3 F2.1.

PRODUCT

PDZK1 (m): 293T Lysate represents a lysate of mouse PDZK1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

PDZK1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive PDZK1 antibodies. Recommended use: 10-20 µl per lane.

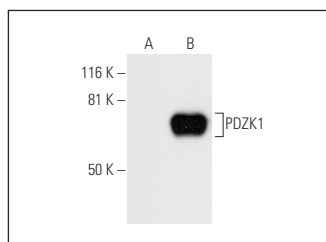
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PDZK1 (H-1): sc-390932 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse PDZK1 expression in PDZK1 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-IgGκ BP-HRP: sc-516102 or m-IgGκ 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



PDZK1 (H-1): sc-390932. Western blot analysis of PDZK1 expression in non-transfected: sc-117752 (A) and mouse PDZK1 transfected: sc-122475 (B) 293T whole cell lysates.

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 for detailed protocols and support products.