

SKIP (h3): 293 Lysate: sc-158962

BACKGROUND

The inositol polyphosphate 5-phosphatases selectively remove the phosphate from the 5-position of various phosphatidylinositols, which generate second messengers in response to extracellular signals. SKIP (skeletal muscle and kidney enriched inositol phosphatase) is a Type II 5-phosphatase that contains two highly conserved catalytic motifs. It is predominantly expressed in skeletal muscle, heart, brain, and kidney, but can also be detected in some tissues as a shorter protein, which is produced by alternative splicing. SKIP has a high affinity for phosphatidylinositol 4,5-bisphosphate as a substrate as well as inositol 1,4,5-trisphosphate, inositol 1,3,4,5-tetrakisphosphate, and phosphatidylinositol 3,4,5-trisphosphate. SKIP is localized in the cytoplasm and at ruffling membranes. Cells expressing SKIP display a loss of Actin stress fibers where the protein was localized, suggesting that SKIP plays a negative role in regulating the Actin cytoskeletal structure.

REFERENCES

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2. Zhang, X., et al. 1998. Phosphatidylinositol signalling reactions. *Semin. Cell Dev. Biol.* 9: 153-160.
3. Erneux, C., et al. 1998. The diversity and possible functions of the inositol polyphosphate 5-phosphatases. *Biochim. Biophys. Acta* 1436: 185-199.
4. Mochizuki, Y., et al. 1999. Novel inositol polyphosphate 5-phosphatase localizes at membrane ruffles. *J. Biol. Chem.* 274: 36790-36795.
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7. Ijuin, T., et al. 2003. SKIP negatively regulates Insulin-induced GLUT4 translocation and membrane ruffle formation. *Mol. Cell. Biol.* 23: 1209-1220.

CHROMOSOMAL LOCATION

Genetic locus: INPP5K (human) mapping to 17p13.3.

PRODUCT

SKIP (h3): 293 Lysate represents a lysate of human SKIP transfected 293 cells and is provided as 100 µg protein in 200 µl 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

SKIP (h3): 293 Lysate is suitable as a Western Blotting positive control for human reactive SKIP antibodies. Recommended use: 10-20 µl per lane.

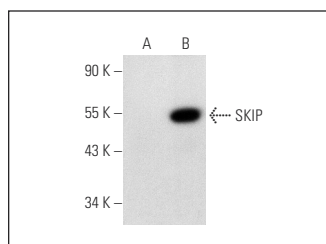
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

SKIP (B-6): sc-365362 is recommended as a positive control antibody for Western Blot analysis of enhanced human SKIP expression in SKIP 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-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



SKIP (B-6): sc-365362. Western blot analysis of SKIP expression in non-transfected: sc-110760 (A) and human SKIP transfected: sc-158962 (B) 293 whole cell lysates.

RESEARCH USE

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