

SKIP (D-15): sc-12071

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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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.
5. Ijuin, T., et al. 2000. Identification and characterization of a novel inositol polyphosphate 5-phosphatase. *J. Biol. Chem.* 275: 10870-10875.
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CHROMOSOMAL LOCATION

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

SOURCE

SKIP (D-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SKIP of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-12071 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

SKIP (D-15) is recommended for detection of SKIP of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SKIP (D-15) is also recommended for detection of SKIP in additional species, including equine.

Suitable for use as control antibody for SKIP siRNA (h): sc-106937, SKIP shRNA Plasmid (h): sc-106937-SH and SKIP shRNA (h) Lentiviral Particles: sc-106937-V.

Molecular Weight of SKIP splice variants: 43/51 kDa.

Positive Controls: A-673 nuclear extract: sc-2128, HeLa nuclear extract: sc-2120 or DU 145 nuclear extract: sc-24960.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



SKIP (D-15): sc-12071. Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic staining of glandular cells.

RESEARCH USE

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

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Try **SKIP (B-6): sc-365362**, our highly recommended monoclonal alternative to SKIP (D-15).