SANTA CRUZ BIOTECHNOLOGY, INC.

NIPSNAP1 (K-15): sc-86761



BACKGROUND

The transient receptor potential (TRP) protein family consists of a diverse group of cation channels functioning in a variety of homeostatic and regulatory pathways. Four subfamilies exist, based on channel domain homology, not activating stimuli: C type (canonical or classical), V type (vanilloid receptor related), M type (melastatin related) and P type (PKD). NIPSNAP1 (4-nitrophenylphophatase domain and non-neuronal SNAP25-like 1) is a 228 amino acid protein that is abolishes TRPV6 currents, which facilitates calcium entry across the plasma membrane in pancreas, placenta, and to a lesser extent stomach and kidney tissue. TRPV6 membrane expression does not change in the presence of NIPSNAP1, which suggests that TRPV6 inhibition by NIPSNAP1 is independently regulated from reduced cell surface channel expression.

CHROMOSOMAL LOCATION

Genetic locus: NIPSNAP1 (human) mapping to 22q12.2; Nipsnap1 (mouse) mapping to 11 A1.

SOURCE

NIPSNAP1 (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NIPSNAP1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-86761 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

NIPSNAP1 (K-15) is recommended for detection of NIPSNAP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

NIPSNAP1 (K-15) is also recommended for detection of NIPSNAP1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for NIPSNAP1 siRNA (h): sc-75923, NIPSNAP1 siRNA (m): sc-149978, NIPSNAP1 shRNA Plasmid (h): sc-75923-SH, NIPSNAP1 shRNA Plasmid (m): sc-149978-SH, NIPSNAP1 shRNA (h) Lentiviral Particles: sc-75923-V and NIPSNAP1 shRNA (m) Lentiviral Particles: sc-149978-V.

Molecular Weight of NIPSNAP1: 34 kDa.

Molecular Weight of NIPSNAP1 truncated form: 29 kDa.

Positive Controls: rat liver extract: sc-2395, mouse liver extract: sc-2256 or KNRK whole cell lysate: sc-2214.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA





NIPSNAP1 (K-15): sc-86761. Western blot analysis of NIPSNAP1 expression in rat liver (**A**) and mouse liver (**B**) tissue extracts.

NIPSNAP1 (K-15): sc-86761. Western blot analysis of NIPSNAP1 expression in KNRK whole cell lysate.

STORAGE

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

PROTOCOLS

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

MONOS Satisfation Guaranteed

Try NIPSNAP1 (H-9): sc-515197 or NIPSNAP1/2

(F-4): sc-393201, our highly recommended monoclonal alternatives to NIPSNAP1 (K-15).