

SKI-1 (N-17): sc-9785

BACKGROUND

Mammalian serine proteases function as proprotein convertases, processing inactive precursors to produce active peptides and proteins. SKI-1 (subtilisin/kexin-isozyme-1) is a type I membrane-bound Ca^{2+} -dependent serine proteinase. SKI-1 is related to bacterial subtilisin and yeast kexin. Subtilisin is an alkaline serine protease produced by *Bacillus subtilis* 168. Kexin is a pro-hormone-processing enzyme, which is encoded by the KEX2 gene of the yeast *Saccharomyces cerevisiae*. SKI-1 is present in most tissues and cells, and it is most concentrated in liver and thyroid tissues. SKI-1 has been shown to cleave the brain-derived neurotrophic factor (BDNF) precursor to produce the mature form of BDNF.

CHROMOSOMAL LOCATION

Genetic locus: MBTPS1 (human) mapping to 16q23.3; Mbtps1 (mouse) mapping to 8 E1.

SOURCE

SKI-1 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SKI-1 of rat origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-9785 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as agarose conjugate for immunoprecipitation, sc-9785 AC, 500 μ g/0.25 ml agarose in 1 ml.

APPLICATIONS

SKI-1 (N-17) is recommended for detection of SKI-1 precursor 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); non cross-reactive with processed forms of SKI-1.

SKI-1 (N-17) is also recommended for detection of SKI-1 precursor in additional species, including equine and bovine.

Suitable for use as control antibody for SKI-1 siRNA (h): sc-36496, SKI-1 siRNA (m): sc-36497, SKI-1 shRNA Plasmid (h): sc-36496-SH, SKI-1 shRNA Plasmid (m): sc-36497-SH, SKI-1 shRNA (h) Lentiviral Particles: sc-36496-V and SKI-1 shRNA (m) Lentiviral Particles: sc-36497-V.

Molecular Weight of SKI-1 precursor: 148 kDa.

Molecular Weight of SKI-1 membrane-bound isoform: 120/106 kDa.

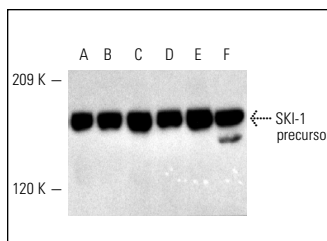
Molecular Weight of SKI-1 secreted: 98 kDa.

Positive Controls: H4 cell lysate: sc-2408, HeLa whole cell lysate: sc-2200 or T98G cell lysate: sc-2294.

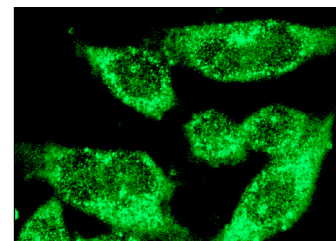
RECOMMENDED SECONDARY REAGENTS

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



SKI-1 (N-17): sc-9785. Western blot analysis of SKI-1 precursor expression in H4 (A), HeLa (B), T98G (C), U-87 MG (D), K-562 (E) and KNRK (F) whole cell lysates.



SKI-1 (N-17): sc-9785. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic staining.

SELECT PRODUCT CITATIONS

- Ronis, M.J., et al. 2009. Dietary soy protein isolate attenuates metabolic syndrome in rats via effects on PPAR, LXR, and SREBP signaling. *J. Nutr.* 139: 1431-1438.
- Ronis, M.J., et al. 2010. Rice protein isolate improves lipid and glucose homeostasis in rats fed high fat/high cholesterol diets. *Exp. Biol. Med.* 235: 1102-1113.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. 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 or our catalog for detailed protocols and support products.