

SKI-1 (H-300): sc-20757

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 (H-300) is a rabbit polyclonal antibody raised against amino acids 753-1052 of SKI-1 of human origin.

PRODUCT

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

STORAGE

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

APPLICATIONS

SKI-1 (H-300) is recommended for detection of precursor and processed SKI-1 (subtilisin/kexin-isozyme-1) 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), 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).

SKI-1 (H-300) is also recommended for detection of precursor and processed SKI-1 (subtilisin/kexin-isozyme-1) in additional species, including equine, canine, bovine and porcine.

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 isoforms: 120/106 kDa.

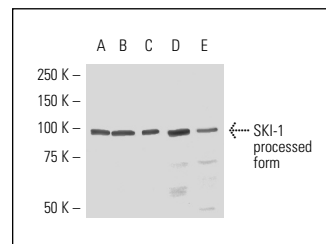
Molecular Weight of secreted SKI-1: 98 kDa.

Positive Controls: H4 cell lysate: sc-2408, K-562 whole cell lysate: sc-2203 or T98G cell lysate: sc-2294.

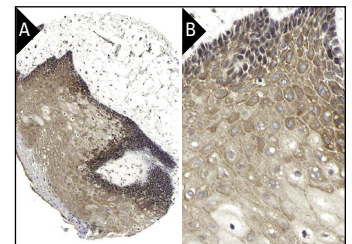
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



SKI-1 (H-300): sc-20757. Western blot analysis of SKI-1 processed form expression in T98G (A), H4 (B), K-562 (C), Hep G2 (D) and PC-12 (E) whole cell lysates.



SKI-1 (H-300): sc-20757. Immunoperoxidase staining of formalin fixed, paraffin-embedded human oral mucosa tissue showing cytoplasmic staining of surface epithelial cells at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

SELECT PRODUCT CITATIONS

1. Chehna-Patel, N., et al. 2011. Proteolytic tailoring of the heat shock protein 70 and its implications in the pathogenesis of endometriosis. *Fertil. Steril.* 95: 1560-1567.

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.

MONOS
Satisfaction
Guaranteed

Try **SKI-1 (A-11): sc-271916**, our highly recommended monoclonal alternative to SKI-1 (H-300).