

ITI-H3 (H-62): sc-99161

BACKGROUND

The inter- α trypsin inhibitor (ITI) family is a group of structurally related plasma serine protease inhibitors synthesized in the liver and built up from different combinations of three highly homologous heavy chains (ITI-H1, ITI-H2 and ITI-H3) and one light chain (Bikunin). Another member of the ITI family, ITI-H4 (also known as I α IH4P) harbors a pro-rich region (PRR) in its C-terminus. ITI is a glycoprotein composed of three polypeptides linked by chondroitin sulphate: two heavy chains, ITI-H1 and ITI-H2, and Bikunin. Bikunin confers the protease-inhibitor function of ITI. The heavy chains of the ITI family, designated as SHAPs (for serum-derived hyaluronan-associated proteins), bind covalently to hyaluronic acid (HA), resulting in pericellular matrix stabilization. Although ITI-H1, ITI-H3 and Bikunin have antitumoral and antimetastatic properties in the cell, these proteins are also associated with malignant transformation of lung tissue. ITI-H3 and Bikunin associate to form pre- α -trypsin inhibitor (P α I), a serine-proteinase inhibitor found in human serum. ITI-H3 mRNA levels increase in response to IL-6.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ITIH3 (human) mapping to 3p21.1.

RESEARCH USE

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

SOURCE

ITI-H3 (H-62) is a rabbit polyclonal antibody raised against amino acids 308-369 mapping within an internal region of ITI-H3 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.

APPLICATIONS

ITI-H3 (H-62) is recommended for detection of precursor and mature chain of ITI-H3 of 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).

Suitable for use as control antibody for ITI-H3 siRNA (h): sc-39599, ITI-H3 shRNA Plasmid (h): sc-39599-SH and ITI-H3 shRNA (h) Lentiviral Particles: sc-39599-V.

Molecular Weight of ITI-H3: 100 kDa.

Positive Controls: WI 38 whole cell lysate.

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.

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.