

TATI (E-2): sc-374409



The Power to Question

BACKGROUND

Tumor-associated trypsin inhibitor (TATI), also designated pancreatic secretory trypsin inhibitor, contains one Kazal-like domain. It is a secreted trypsin inhibitor preventing trypsin-catalyzed premature activation of zymogens in the pancreas. The gene encoding for this 79 amino acid protein, named SPINK1, localizes to chromosome 5q32. Defects in this gene are the cause of chronic pancreatitis (CP), an autosomal dominant disease causing severe abdominal pain attacks. CP is characterized by calculi in pancreatic ducts. TATI can be found in the cyst fluid of cystic pancreatic lesion patients and is a potential marker for differentiating between the diagnosis of benign cystic pancreatic lesions and malignant cystic pancreatic lesions.

CHROMOSOMAL LOCATION

Genetic locus: SPINK1 (human) mapping to 5q32.

SOURCE

TATI (E-2) is a mouse monoclonal antibody raised against amino acids 1-72 mapping at the N-terminus of TATI of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TATI (E-2) is available conjugated to agarose (sc-374409 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374409 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374409 PE), fluorescein (sc-374409 FITC), Alexa Fluor® 488 (sc-374409 AF488), Alexa Fluor® 546 (sc-374409 AF546), Alexa Fluor® 594 (sc-374409 AF594) or Alexa Fluor® 647 (sc-374409 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374409 AF680) or Alexa Fluor® 790 (sc-374409 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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STORAGE

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

APPLICATIONS

TATI (E-2) is recommended for detection of TATI of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

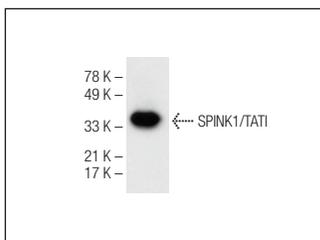
Suitable for use as control antibody for TATI siRNA (h): sc-45801, TATI shRNA Plasmid (h): sc-45801-SH and TATI shRNA (h) Lentiviral Particles: sc-45801-V.

Molecular Weight of TATI: 6 kDa.

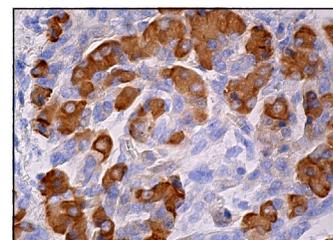
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



TATI (E-2): sc-374409. Western blot analysis of human recombinant SPINK1/TATI.



TATI (E-2): sc-374409. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

- Holah, N.S., et al. 2017. The diagnostic role of SPINK1 in differentiating hepatocellular carcinoma from nonmalignant lesions. *Appl. Immunohistochem. Mol. Morphol.* 25: 703-711.
- Beyene, D.A., et al. 2018. Differential expression of Annexin 2, SPINK1, and Hsp60 predict progression of prostate cancer through bifurcated WHO Gleason score categories in African American men. *Prostate* 78: 801-811.
- Wang, Z.C., et al. 2020. miR-5089-5p suppresses castration-resistant prostate cancer resistance to enzalutamide and metastasis via miR-5089-5p/SPINK1/ MAPK/MMP9 signaling. *Aging* 12: 20930.
- Li, D., et al. 2022. Identification and exploration of serine peptidase inhibitor kazal type I (SPINK1) as a potential biomarker correlated with the progression of non-small cell lung cancer. *Cell. Biochem. Biophys.* 80: 807-818.

RESEARCH USE

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

PROTOCOLS

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