

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                 |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human SPINK1 in direct ELISAs and Western blots.                              |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Sheep IgG                                                                  |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                             |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human SPINK1<br>Asp24-Cys79<br>Accession # P00995 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 405<br>Excitation Wavelength: 405 nm<br>Emission Wavelength: 421 nm       |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                          |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                       |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

SPINK1 (Serine Protease Inhibitor Kazal-type 1; also TATI and PST1) is a 6-7 kDa secreted polypeptide initially identified as a tumor-derived trypsin inhibitor. It is widely expressed, and found in cells diverse as pancreatic acinar cells, columnar cells of the stomach, renal collecting duct epithelium, and ureteric transitional plus breast epithelium. SPINK1 is known to be secreted with pancreatic zymogens, and apparently inactivates prematurely-activated trypsin, thus protecting the pancreas from trypsin-mediated enzyme activation. It also is reported to regulate cell migration and proliferation, the latter effect attributed to its structural resemblance to EGF, and its ability to bind to activate the EGFR. Mature human SPINK1 is 56 amino acids (aa) in length (aa 24-79). It contains one Kazal-like domain (aa 26-79) that possesses a potential proteolytic cleavage site between Lys41-Ile42. An 11-12 kDa form in SDS-PAGE has been reported for SPINK1, possibly reflecting dimerization. Mature human SPINK1 shares 66% aa sequence identity with mouse Spink3, the mouse equivalent to human SPINK1.

## PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.