



Recombinant Protein Technical Manual

Recombinant Human SPINK1 Protein (His Tag)

RPES4806

Product Data:

Product SKU: RPES4806

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P00995

Protein Information:

Molecular Mass: 7.3 kDa

AP Molecular Mass: 13 kDa

Tag: C-6His

Bio-activity:

Purity: > 85 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

Formulation: Supplied as a 0.2 µm filtered solution of 20mM MES, 150mM NaCl, 2mM CaCl₂, 1mM DTT, 0.05% Brij35, 10% Glycerol, pH 6.0.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Pancreatic Secretory Trypsin Inhibitor; Serine Protease Inhibitor Kazal-Type 1; Tumor-Associated Trypsin Inhibitor; TATI; SPINK1; PSTI

Immunogen Information:

Sequence: Asp24-Cys79

Background:

Serine Protease Inhibitor Kazal-Type 1 (SPINK1) is a trypsin inhibitor that prevent the trypsin-catalyzed premature activation of zymogens within the pancreas. Defects in SPINK1 are a cause of pancreatitis (PCTT). A disease characterized by the presence of calculi in pancreatic ducts. It causes severe abdominal pain attacks. Defects in SPINK1 are the cause of susceptibility to tropical calcific pancreatitis (TCP). Recombinant SPINK1 protein (rSPINK1) stimulated cell proliferation in benign RWPE as well as cancerous prostate cells. The research result indicated that the potential of SPINK1 as an extracellular therapeutic target in prostate cancer. In contrast, knockdown of SPINK1 in 22RV1 cells inhibited cell proliferation, cell invasion, and tumor growth in xenograft assays.