



Recombinant Protein Technical Manual

Recombinant Human ERN1/IRE1 Protein (aa 465-977)(Active)
RPES4816

Product Data:

Product SKU: RPES4816

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: O75460

Protein Information:

Molecular Mass: 58.3 kDa

AP Molecular Mass: 65 kDa

Tag:

Bio-activity: 1. Kinase activity untested 2. Measured by its nuclease activity to cleave Xbp1 single stem-loop mini-substrate.

Purity: > 80 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg of the protein 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 or dry ice.

Formulation: Lyophilized from sterile 20mM Tris, 500mM NaCl, 10% glycerol, pH 7.4

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

Application:

Synonyms: hIRE1p;IRE1;IRE1a;IRE1P

Immunogen Information:

Sequence: Pro 465-Leu 977

Background:

Trypsin-3, also known as Trypsin III, brain trypsinogen, Serine protease 3 and PRSS3, is a secreted protein which belongs to the peptidase S1 family. Trypsin-3 / PRSS3 is expressed in pancreas and brain. It contains one peptidase S1 domain. Trypsin-3 / PRSS3 can degrade intrapancreatic trypsin inhibitors that protect against CP. Genetic variants that cause higher mesotrypsin activity might increase the risk for chronic pancreatitis (CP). A sustained imbalance of pancreatic proteases and their inhibitors seems to be important for the development of CP. The trypsin inhibitor-degrading activity qualified PRSS3 as a candidate for a novel CP susceptibility gene. Trypsin-3 / PRSS3 has been implicated as a putative tumor suppressor gene due to its loss of expression, which is correlated with promoter hypermethylation, in esophageal squamous cell carcinoma and gastric adenocarcinoma.