

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

Catalog No. PKSH030975

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

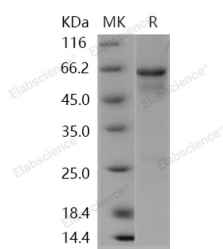
### Description

<b>Synonyms</b>	hIRE1p;IRE1;IRE1a;IRE1P
<b>Species</b>	Human
<b>Expression Host</b>	Baculovirus-Insect Cells
<b>Sequence</b>	Pro 465-Leu 977
<b>Accession</b>	O75460-1
<b>Calculated Molecular Weight</b>	58.3 kDa
<b>Observed molecular weight</b>	65 kDa
<b>Tag</b>	None
<b>Bioactivity</b>	1. Kinase activity untested 2. Measured by its nuclease activity to cleave Xbp1 single stem-loop mini-substrate.

### Properties

<b>Purity</b>	> 80 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile 20mM Tris, 500mM NaCl, 10% glycerol, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 80 % as determined by reducing SDS-PAGE.

### Background

Trypsin-3; also known as Trypsin III; brain trypsinogen; Serine protease 3 and PRSS3; is a secreted protein which belongs

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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.