

# Datasheet for ABIN7317465

## **ERN1 Protein**



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| Quantity:                    | 50 μg  |
|------------------------------|--|
| Target:                      | ERN1   |
| Origin:                      | Human  |
| Source:                      | Baculovirus infected Insect Cells  |
| Protein Type:                | Recombinant  |
| Biological Activity:         | Active   |
| Product Details              |  |
| Purpose:                     | Recombinant Human ERN1/IRE1 Protein (aa 465-977)(Active)   |
| Sequence:                    | Pro 465-Leu 977  |
| Characteristics:             | A DNA sequence encoding the human ERN1 (075460-1) (Pro 465-Leu 977) was expressed and purified with two additional amino acids (Gly & Pro ) at the N-terminus. |
| Purity:                      | > 80 % as determined by reducing SDS-PAGE.   |
| Endotoxin Level:             | < 1.0 EU per µg of the protein as determined by the LAL method.  |
| Biological Activity Comment: | 1.Kinase activity untested 2. Measured by its nuclease activity to cleave Xbp1 single stem-loop mini-substrate.  |
| Target Details               |  |
| Target:                      | ERN1   |
| Alternative Name:            | ERN1/IRE1 (ERN1 Products)  |

### Target Details

| Background: |
|-------------|
|-------------|

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 is 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. Synonym: hIRE1p;IRE1;IRE1a;IRE1P

Molecular Weight:

58.3 kDa

Pathways:

ER-Nucleus Signaling, Unfolded Protein Response

### **Application Details**

Restrictions:

For Research Use only

#### Handling

| Format:          | Lyophilized   |  |  |
|------------------|---|--|--|
| Reconstitution:  | Please refer to the printed manual for detailed information.                                  |  |  |
| Buffer:          | Lyophilized from sterile 20 mM Tris, 500 mM NaCl, 10 % glycerol, pH 7.4                       |  |  |
| Storage:         | 4 °C,-20 °C,-80 °C  |  |  |
| Storage Comment: | 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.   |  |  |