Recombinant Human ERN1/IRE1 Protein (aa 465-977, His &GST Tag)

Catalog Number: PKSH030346

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

Description	
Species	Human
Source	Baculovirus-Insect Cells-derived Human ERN1/IRE1 protein Pro 465-Leu 977, with an
	N-terminal His & CST
Calculated MW	86.0 kDa
Observed MW	90 kDa
Accession	O75460-1
Bio-activity	The specific activity was determined to be 5 nmol/min/mg using MBP as substrate
Properties	
Purity	> 80 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
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/gel
	packs. Upon receipt, store it immediately at $< -20^{\circ}$ C.
Formulation	Supplied as sterile solution of 20mM Tris, 500mM NaCl, 10% glycerol, pH 7.4
Data	
KDa MK	n ^{ce} R
116	
66.2	ante
45.0	Elabsol
35.0	nce"
subscience	classicience"
25.0	
18.4	

> 80 % as determined by reducing SDS-PAGE.

144

Background

The encoded protein contains two functional catalytic domains; a serine/threonine-protein kinase domain and an endoribonuclease domain. This protein functions as a sensor of unfolded proteins in the endoplasmic reticulum (ER) and triggers an intracellular signaling pathway termed the unfolded protein response (UPR). The UPR is an ER stress response that is conserved from yeast to mammals and activates genes involved in degrading misfolded proteins; regulating protein synthesis and activating molecular chaperones. This protein specifically mediates the splicing and activation of the stress response transcription factor X-box binding protein 1.