



Recombinant Protein Technical Manual

Recombinant Human ERN1/IRE1 Protein (aa 465-977, His & GST Tag)(Active)
RPES1048

Product Data:

Product SKU: RPES1048

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: O75460

Protein Information:

Molecular Mass: 86 kDa

AP Molecular Mass: 90 kDa

Tag: N-His & GST

Bio-activity: 1. Kinase activity untested 2. The specific activity was determined to be 5 nmol/min/mg using MBP as substrate

Purity: > 80 % 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 sterile 20mM Tris, 500mM NaCl, 10% gly, 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:

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.