Human ERN1/IRE1 (aa 465-977, His & GST Tag) recombinant protein

Catalog Number: 503434



General Information

Gene Name Synonym

Endoplasmic reticulum-to-nucleus signaling 1; Inositol-requiring protein 1; Ire1-alpha; Serine/threonine-protein kinase; Endoribonuclease

Protein Construction

A DNA sequence encoding the human ERN1 isoform 1 (O75460-1) cytoplasmic domain (Pro 465-Leu 977) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus.

Organism

Human

Expression Host

Baculovirus-Insect Cells

QC Testing

Activity

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

Purity

> 80 % as determined by SDS-PAGE

Endotoxin

 $< 1.0 \; \text{EU}$ per μg of the protein as determined by the LAL method

Stability

Samples are stable for up to twelve months from date of receipt at -70°C

Predicted N terminal

Met

Molecular Mass

The recombinant human ERN1/GST chimera consists of 750 amino acids and has a calculated molecular mass of 86 kDa. It migrates as an approximately 90 kDa band in SDS-PAGE under reducing conditions.

Formulation

Supplied as sterile 20mM Tris, 500mM NaCl, 10% gly, pH 7.4

- $1.\,5$ % trehalose and mannitol are added as protectants before lyophilization.
- 2. Please contact us for any concerns or special requirements.

Usage Guide

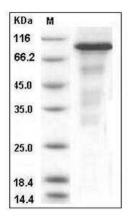
Storage

Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Reconstitution

Adding sterile water, prepare a stock solution of 0.25 mg/ml. Concentration is measured by UV-Vis.

SDS-PAGE



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