

Product datasheet for TP315023

IRE1 (ERN1) (NM_001433) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human endoplasmic reticulum to nucleus signaling 1 (ERN1), 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC215023 representing NM_001433 Red=Cloning site Green=Tags(s)

MPARRLLLLLLTLLLPLGLGIFGSTSTVTLPETLLFVSTLDGSLHAVSKRTGSIKWTLKEDPVLQVPTHVEE
PAFLPDPNDGSLYTLGSKNNEGLTKLPFTIPELVQASPCRSSDGILYMGKKQDIWYVIDLLTGEKQQTLS
SAFADSLCPSTSLLYLGRTEYTITMYDTKTRELROWNATYFDYAAASLPEDDVYKMSHFVSNGLVTVVD
SESGDVLWIQNYASPVVAFYVWQREGLRKVMHINAVETLRYLTFMSGEVGRITKWYPPFKETEAKSKL
TPTLYVGGKYSTSLYASPSMVHEGVAVVPRGSTLPLLEGPQTDGVTIGDKGECVITPSTDVKFDPGLKSKN
KLNYL RNYWLLIGHHETPLSASTKMLERFPNNLPKHRENVIPADSEKKSFEVINLVDQTSENAPTTVSR
DVEEKPAHAPARPEAPVDSMLKDMATIILSTFLLIGWVAFIITYPLSMHQQQQLQHQQFQKELEKIQLLQ
QQQQQLPFHPPGDTAQDGEELDTSGPYSESSGTSSPSTSPRASNHSLCSGSSASKAGSSPSLEQDDGDEE
TSWVIVGKISFCPKDVLGHGAEGTIVYRGMFDNRDVAVKRILPECFSFADREVQLLRESDEHPNVIRYFC
TEKDRQFQYIAIELCAATLQEYVEQKDFAHGLLEPITLLQQTTSGLAHLHSLNIVHRDLKPHNILISMPN
AHGKIKAMISDFGLCKKLAVGRHSFSRRSGVPGTEGWIAPEMLSEDCKENPTYTVDIFSAGCVFYVISE
GSHPFKSLQRQANILLGACSLDCLHPEKHEDVIARELIEKMIAMDPQKRPSAKHVLKHPFFWSLEKQLQ
FFQDVSDRIEKESLDGPVVKQLERGGRAVVKMDWRENITVPLQTDLRKFRTYKGGSVRDLLRAMRNKKHH
YRELPAEVRETLGSLPDDFVCYFTSRFPHLLAHTYRAMELCSHERLFQPYFHEPPEPQPPVTPDAL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

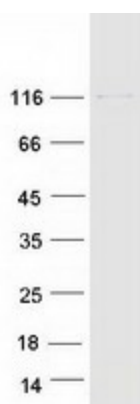
Tag:	C-Myc/DDK
Predicted MW:	109.6 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Bioactivity:	WB positive control (PMID: 27622292) Binding assay (ITC) (PMID: 28416388)



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Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_001424
Locus ID:	2081
UniProt ID:	O75460
RefSeq Size:	3620
Cytogenetics:	17q23.3
RefSeq ORF:	2931
Synonyms:	hIRE1p; IRE1; IRE1a; IRE1P
Summary:	This gene encodes the transmembrane protein kinase inositol-requiring enzyme 1. 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. [provided by RefSeq, Aug 2017]
Protein Families:	Protein Kinase, Transmembrane
Protein Pathways:	Alzheimer's disease

Product images:



Coomassie blue staining of purified ERN1 protein (Cat# TP315023). The protein was produced from HEK293T cells transfected with ERN1 cDNA clone (Cat# [RC215023]) using MegaTran 2.0 (Cat# [TT210002]).

