

## Product datasheet for **TP315023M**

### 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), 100 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC215023 representing NM_001433 <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MPARRLLLLLLTLLLPLGLGIFGSTSTVTLPETLLFVSTLDGSLHAVSKRTGSIKWTLKEDPVLQVPTHVEE  
PAFLPDPNDGSLYTLGSKNNEGLTKLPFTIPELVQASPCRSSDGILYMGKKQDIWYVIDLLTGEKQQTLS  
SAFADSLCPSTSLLYLGRTEYTITMYDTKTRELRW NATYFDY AASLPEDD VDYKMSHFVSN GDGLVTV D  
SESGDVLW IQNYASP VVAFYVWQREGLRKVMHIN VAVETLRYLTFMSGEVGRITKWYPPFKETEAKSKL  
TPTLYV GKYSTSLYASPSMVHEGVAVVPRGSTLPLLEGPQTDGVTIGDKGECVITPSTDV KFDPGLKSKN  
KLN YLRNYWLLIGHHETPLSASTKMLERFPNNLPKHRENVIPADSEKKSFEVINLVDQTS ENAPTTVSR  
DVEEKPAHAPARPEAPVDSMLKDMATIILSTFLLIGWVAFIITYPLSMHQQQQLQHQQFQKELEKIQLLQ  
QQQQQLPFHPPGDTAQDGELLDTS GPYSESSGTSSPSTSPRASNHSLCSGSSASKAGSSPSLEQDDGDEE  
TSWVIVGKISFCPKDVLGHGAEGTIVYRGMFDNRD VAVKRILPECFSFADREVQLLRESDEHPNVIRYFC  
TEKDRQFQYIAIELCAATLQEYVEQKDFAHLGLEPITLLQQTTSGLAHLHSLNIVHRDLKPHNILISMPN  
AHGKIKAMISDFGLCKKLAVGRHSFSRRSGVPGTEGWIAPEMLSEDCKENPTYTVDIFSAGCVFYVISE  
GSHPF GKSLQRQANILLGACSLDCLHPEKHEDVIARELIEKMIAMDPQKRPSAKHVLKHPFFWSLEKQLQ  
FFQDVSDRIEKESLDGPV KQLERGGRAVVKMDWRENITVPLQTDLRKFR TYKGGSVRDLLRAMRNKKHH  
YRELPAEVRETLGSLPDDFVCYFTSRFPHLLAHTYRAMELCSHERLFQPYFHEPPEPQPPVTPDAL

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

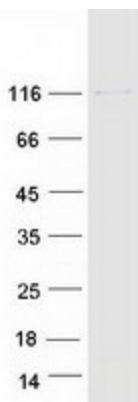
Tag:	C-Myc/DDK
Predicted MW:	109.6 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Bioactivity:	WB positive control (PMID: <a href="#">27622292</a> )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



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<b>Preparation:</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_001424</a>
<b>Locus ID:</b>	2081
<b>UniProt ID:</b>	<a href="#">O75460</a>
<b>RefSeq Size:</b>	3620
<b>Cytogenetics:</b>	17q23.3
<b>RefSeq ORF:</b>	2931
<b>Synonyms:</b>	hIRE1p; IRE1; IRE1a; IRE1P
<b>Summary:</b>	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]
<b>Protein Families:</b>	Protein Kinase, Transmembrane
<b>Protein Pathways:</b>	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]).

