

Product datasheet for TP526999

Ern1 (NM_023913) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse endoplasmic reticulum (ER) to nucleus signalling 1 (Ern1), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR226999 representing NM_023913 Red=Cloning site Green=Tags(s)

MPARWLLLLLALLPPPSPGSGFGRSTVTLPETLLFVSTLDGSLHAVSKRTGSIKWTLKEDPVLQVPTHV
EPAFLPDPNDGSLYTLGGKNEGLTKLPFTIPELVQASPCRSSDGILYMGKKQDIWYVIDLLTGEKQQT
LSSAFADSLCPSTSLLYLGRTEYITIMYDTKTRELRNWATYFDYAASLPEDDVDYKMSHFVSNGLDGLVT
VDESGLDVLWIQNYASPVVAFYVWQGEVLRKVVHINAVETLRYLTFMSGEVGRITKWKYPPFKETEAKS
KLTPTLYVGKYSTSLYASPSMVHEGVAWVPRGSTLPLEGPQTDGVTIGDKGECVITPSTDLKFDPGLKG
KSKLNYLRNYWLLIGHHETPLSASTKMLERFPNNLPKHRENVIPADSEKRSFEEVINIVGQTSDNTPPTTV
SQDVEEKLARAPAKPEAPVDSMLKDMATIILSTFLLVGVVAFIITYPLSVHQQRQLQHQQFQKELEKIQL
LQQQQLPFHPHGDLTQDPEFLDSSGPFSESSGTSSPSPSRASNHSLHPSSASRAGTSPSLEQDDEDEE
TRMVIVGKISFCPKDVLGHGAEGTIVYKGMFDNRDVAVKRILPECFSFADREVQLLRESDEHPNVIRYFC
TEKDRQFQYIAIELCAATLQEYVEQKDFAHGLLEPITLLHQTTSGLAHLHSLNIVHRDLKPHNILLSMPN
AHGRIKAMISDFGLCKLAVGRHSFSRRSGVPGTEGWIAPEMLSEDCKDNPTYTVDIFSAGCVFYVISE
GNHPFGKSLQRQANILLGACNLDCFHSDKHEDVIARELIEKMIAMDPQQRPSAKHVLKHPFFWSLEKQLQ
FFQDVSDRIEKEALDGPIVRQLERGGRAVVKMDWRENITVPLQTDLRKFRTYKGGSVRDLLRAMRNKKHH
YRELPVEVQETLGSIPDDFVRYFTSRFPHLLSHTYQAMELCRHERLFQTYWHEPTEPQPPVPIYAL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-MYC/DDK
Predicted MW:	110.6 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



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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 after receiving vials.
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_076402
Locus ID:	78943
UniProt ID:	Q9EQY0
RefSeq Size:	3976
Cytogenetics:	11 E1
RefSeq ORF:	2931
Synonyms:	9030414B18Rik; AI225830; C85377; Ire1a; Ire1alpha; Ire1p
Summary:	Serine/threonine-protein kinase and endoribonuclease that acts as a key sensor for the endoplasmic reticulum unfolded protein response (UPR) (PubMed:11850408, PubMed:25164867). In unstressed cells, the endoplasmic reticulum luminal domain is maintained in its inactive monomeric state by binding to the endoplasmic reticulum chaperone HSPA5/BiP. Accumulation of misfolded protein in the endoplasmic reticulum causes release of HSPA5/BiP, allowing the luminal domain to homodimerize, promoting autophosphorylation of the kinase domain and subsequent activation of the endoribonuclease activity (PubMed:25164867). The endoribonuclease activity is specific for XBP1 mRNA and excises 26 nucleotides from XBP1 mRNA (PubMed:11850408, PubMed:25164867). The resulting spliced transcript of XBP1 encodes a transcriptional activator protein that up-regulates expression of UPR target genes (PubMed:11850408, PubMed:25164867). Acts as an upstream signal for ER stress-induced GORASP2-mediated unconventional (ER/Golgi-independent) trafficking of CFTR to cell membrane by modulating the expression and localization of SEC16A (By similarity).[UniProtKB/Swiss-Prot Function]