

Product datasheet for **RG224780**

IRE1 (ERN2) (NM_033266) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IRE1 (ERN2) (NM_033266) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	IRE1
Synonyms:	hIRE2p; IRE1-BETA; IRE1b; IRE2p
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG224780 representing NM_033266
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGAAGGGCGGGGATCGGCGAGGACTCCAGGCTGGGGTTGCAGGCCAGCCAGGGCGGAGCCTTCTC
 CGGGTCGGGCGGGGACAGAGCGCTCCCTTGGAGGCGCCAGGGACCTGGCCAGCCGTGCAGCTGCCAGG
 CGCTATGGCGAGTGCGGTGAGGGGTCGAGGCCGTGGCCCGGCTGGGGCTCCAGCTCCAGTTCCGCGCG
 CTGCTGCTCGGGACGCTGAGTCCACAGGTTCACTCTCAGGCCAGAGAACCCTCTGCTGGTGTCCACCT
 TGGATGGAAGTCTCCACGCACTAAGCAAGCAGACAGGGGACCTGAAGTGGACTCTGAGGGATGATCCCGT
 CATCGAAGGACCAATGTACGTACAGAAATGGCCTTTCTCTGACCCAGCAGATGGCAGCCTGTACATC
 TTGGGGACCCAAAACAACAGGGATTAATGAAACTGCCATTACCATCCCTGAGCTGGTTATGCCTCTC
 CCTGCCGAGCTCTGATGGGGTCTTCTACACAGGCCGGAAGCAGGATGCCTGGTTTGTGGTGGACCTGA
 GTCAGGGGAGACCCAGATGACACTGACCACAGAGGGTCCCTCCACCCCGCCTCTACATTGGCCGAACA
 CAGTATACGGTACCATGCATGACCCAAGAGCCCCAGCCCTGCGCTGGAACACCACCTACCGCCGCTACT
 CAGCGCCCCCATGGATGGCTCACCTGGGAAATACATGAGCCACCTGGCGTCTCGCGGGATGGGCCTGCT
 GCTCACTGTGGACCCAGGAAGCGGGACGGTGTGTGGACACAGGACCTGGGCGTGCCTGTGATGGGCGTC
 TACACCTGGCACCAGGACGGCTGCGCCAGCTGCCGCACTCACGCTGGCTCGAGACACTCTGCATTTCC
 TCGCCCTCCGCTGGGGCCACATCCGACTGCCTGCCTCAGGCCCGGGACACAGCCACCCCTTCTCTAC
 CTTGGACACCCAGCTGCTAATGACGCTGTATGTGGGAAGGATGAAACTGGCTTCTATGTCTCTAAAGCA
 CTGGTCCACACAGGAGTGGCCCTGATGCCTCGTGGACTGACCCTGGCCCCGAGATGGCCCCACACAG
 ATGAGGTGACACTCCAAGTCTCAGGAGCGGAGGGGCTCACCAGCAGTCTGTTAGATACCCCTCAGG
 CAGTGTGGCCCTCCCAAGCCAGTGGCTGCTCATTGGACACCACGAGCTACCCCGAGTCTGCACACCACC
 ATGCTGAGGGTCCATCCACCCCTGGGGAGTGGAAGTGCAGAGACAAGACCTCCAGAGAATACCCAGGCC
 CAGCCTTCTTCTGGAGCTATTGAGCCTGAGCCGAGAGAACTTTGGGACTCCGAGCTGCATCCAGAAGA
 AAAAACTCCAGACTCTTACTTGGGGCTGGGACCCCAAGACCTGCTGGCAGCTAGCCTCACTGCTGTCTC
 CTGGGAGGGTGGATTCTCTTTGTGATGAGGCAGCAACAGCCGAGGTGGTGGAGAAGCAGCAGGAGACCC
 CCCTGGCAGCTGCAGACTTTGCTCACATCTCCAGGATGCCAGTCCCTGCAGCTCGGGGGCCAGCCGGAG
 GAGCCAGAAGAGGCTTCCAGAGTCCCTCAAAGCAAGCCAGCCACTCGACGACCTGAAGCTGAGCAACTC
 ACCGTAGTGGGAAGATTTCTTCAATCCCAAGGACGTGCTGGGCCGCGGGCAGCGGGACTTTCTGTTT
 TCCGGGGACAGTTTGGAGGACGGGACGTGGCTGTCAAGCGGCTCCTCCGCGAGTGTCTTGGCCTGGTTCCG
 GCGGGAAGTTCAACTGCTGCAGGAGTCTGACAGGCACCCCAACGTGCTCCGCTACTTCTGCACCGAGCGG
 GGACCCAGTTCCACTACATTGCCCTGGAGCTCTGCCGGGCTCCTTGCAGGAGTACGTAGAAAACCCGG
 ACCTGGATCGCGGGGTCTGGAGCCGAGGTGCTGCTGCAGCAGCTGATGTCTGGCCTGGCCACCTGCA
 CTCTTTACACATAGTGCACCGGGACCTGAAGCCAGGAAATATTCTCATACCCGGGCTGACAGCCAGGGC
 CTGGGCAGAGTGGTGTCTCAGACTTCGGCCTCTGCAAGAAGTGCCTGCTGGCCGCTGTAGCTTCAGCC
 TCCACTCCGGCATCCCCGGCACGGAAGGCTGGATGGCGCCGAGCTTCTGCAGCTCCTGCCACAGACAG
 TCCTACCAGCGCTGTGGACATCTTCTGCAAGGCTGCGTGTCTACTACGTGCTTTCTGGTGGCAGCCAC
 CCCTTTGGAGACAGTCTTATCGCCAGGCAAAATCCTCACAGGGGCTCCCTGTCTGGCTACCTGGAGG
 AAGAGGTCCACGACAAGGTGGTTGCCCGGACCTGGTTGGAGCCATGTTGAGCCACTGCCGACGCCACG
 CCCCTCTGCCCCAGGTGCTGGCCACCCCTTCTTTGGAGCAGAGCCAAGCAACTCCAGTTCTTCCAG
 GACGTCAGTACTGGCTGGAGAAGGAGTCCGAGCAGGAGCCCCTGGTGGGGCACTGGAGGCGGGAGGCT
 GCGCAGTGGTCCGGGACAACTGGCACGAGCACATCTCCATGCCGCTGCAGACAGATCTGAGAAAGTTCCG
 GTCCTATAAGGGGACATCAGTGCAGACCTGCTCCGTGCTGTGAGGAACAAGAAGCACCCTACAGGGAG
 CTCCCAGTTGAGGTGCGACAGGCACTCGCCAAGTCCCTGATGGCTTCGTCAGTACTTCACAAACCGCT
 TCCCACGGCTGCTCTCCACACGACCCAGCCATGAGGAGCTGCGCCTCTGAGAGCCTTCTCTGCCCTA
 CTACCCCGCAGACTCAGAGGCCAGGAGCCATGCCCTGGGGCCACAGGGAGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG224780 representing NM_033266
Red=Cloning site Green=Tags(s)

```
MRRAGIGEDSRLGLQAQPGAEPSPGRAGTERSLGGAQGPQPSCPCGAMASAVRGSRPWPRLGLQLQFAA
LLLGLTSPQVHTLRPENLLLVLSTLDGSLHALSKQTGDLKWTLRDDPVIIEGPMYVTEMAFLSDPADGSLYI
LGTQKQQGLMKLPFTIPELVHASPCRSSDGVFYTGKQDAWFVVDPESETQMTLTTEGPSTPRLYIGRT
QYVTVMHDPAPALRWNTTYRRYSAPPMDDGSPGYMSHLASCGMGLLLTVDPGSGTVLWTQDLGVPVMGV
YTWHQDGLRQLPHLTLARDTLHFLALRWGHIRLPASGPRDTATLFTSLDTQLLMTLYVGKDETFYVSKA
LVHTGVALMPRGLTLAPADGPTTDEVTLQVSGEREGSPSTAVRYPGSGVALPSQWLLIGHHELPPVLHHT
MLRVHPTLGSGETRPPENTQAPAFFLELLSLSREKLWDELHPPEKTPDSYLGLPQDLLAASLTAVL
LGGWILFVMRQQQPQVVEKQQETPLAPADFAHISQDAQSLHSGASRRSQKRLQSPSKQAQPLDDPEAEQL
TVVGKISFNPKDVLGRGAGGTFVFRGQFEGRAVAVKRLRECFGLVRREVQLLQESDRHPNVLRYFCTER
GPQFHYIALELCRASLQYVENPDLDRGGLEPEVVLQQLMSGLAHLHSLHIVHRDLKPGNILITGPDSSQ
LGRVVLSDFLCKKLPAGRCFSLSHSGIPGTEGWMAPELLQLPPDSPTSAVDIF SAGCVFYVYVSGGSH
PFGDSLRYQANILTGAPCLAHLEEEVHDKVVARDLVGAMLSPLPQPRPSAPQVLAHPFFWSRAKQLQFFQ
DVS DWLEKESEQEPLVRAL EAGGCAVVRDNWHEHISMP LQTDLRKFRSYKGT SVRDLLRAVRNKKHHYRE
LPVEVRQALGQVPDGFVQYFTNRFPRLLLHTHRMRSCASESLFPYYPDSEARRPCPGATGR
```

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

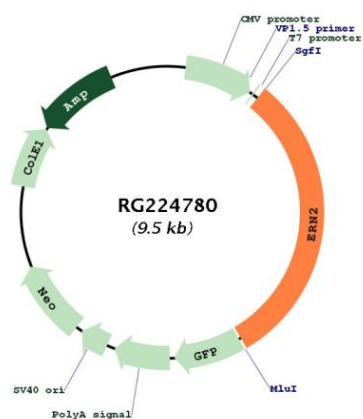


ACCN: NM_033266

ORF Size: 2922 bp

OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_033266.2 , NP_150296.2
RefSeq Size:	3549 bp
RefSeq ORF:	2781 bp
Locus ID:	10595
UniProt ID:	Q76MJ5
Cytogenetics:	16p12.2
Protein Families:	Druggable Genome, Protein Kinase
Gene Summary:	Induces translational repression through 28S ribosomal RNA cleavage in response to ER stress. Pro-apoptotic. Appears to play no role in the unfolded-protein response, unlike closely related proteins.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG224780