

Product datasheet for **SC323535**

IRE1 (ERN2) (NM_033266) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IRE1 (ERN2) (NM_033266) Human Untagged Clone
Tag:	Tag Free
Symbol:	IRE1
Synonyms:	hIRE2p; IRE1-BETA; IRE1b; IRE2p
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_033266, the custom clone sequence may differ by one or more nucleotides

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ATGAGAAGGGCGGGGATCGGCGAGGACTCCAGGCTGGGGTTGCAGGCCAGCCAGGGGCGGAGCCTTCTC
CGGGTCGGGCGGGACAGAGCGCTCCCTTGGAGGCACCCAGGGACCTGGCCAGCCGTGCAGTGGCCAGG
CGCTATGGCGAGTGCGGTACAGGGGTTCAGGCCGTGGCCCGGCTGGGGCTCCAGTCCAGTTCGGGGC
CTGCTGCTCGGGACGCTGAGTCCACAGGTTCACTCTCAGGCCAGAGAACTCCTGCTGGTGTCCACCT
TGGATGGAAGTCTCCACGCACTAAGCAAGCAGACAGGGGACCTGAAGTGACTCTGAGGGATGATCCCGT
CATCGAAGGACCAATGTACGTACAGAAATGGCCTTTCTCTGACCCAGCAGATGGCAGCCTGTACATC
TTGGGGACCCAAAAACAACAGGGATTAATGAAACTGCCATTACCATCCCTGAGCTGGTTCATGCCTCTC
CCTGCCGAGCTCTGATGGGGTCTTCTACACAGGCCGGAAGCAGGATGCCTGGTTTGTGGTGACCTTGA
GTCAGGGGAGACCAGATGACACTGACCACAGAGGGTCCCTCCACCCCGCCTCTACATTGGCCGAACA
CAGTATACGGTACCATGCATGACCCAAGAGCCCGCCTGCGTGGAAACACCACCTACCGCCGCTACT
CAGCGCCCCCATGGATGGCTCACCTGGGAAATACATGAGCCACCTGGCGTCTGCGGGATGGCCCTGCT
GCTCACTGTGGACCCAGGAAGCGGGACGGTGTGTGGACACAGGACCTGGGCGTGCCTGTGATGGGCGTC
TACACCTGGCACCAGGACGGCCTGCGCCAGCTGCCGCATCTCACGCTGGCTCGAGACACTCTGCATTTC
TCGCCCTCCGCTGGGGCCACATCCGACTGCCTGCCTCAGGCCCGGGACACAGCCACCCTTTCTCTAC
CTTGGACACCCAGCTGCTAATGACGCTGTATGTGGGAAGGATGAAACTGGCTTCTATGTCTCTAAAGCA
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ATGCTGAGGGTCCATCCCACTGGGGAGTGGAACTGCAGAGACAAGACCTCCAGAGAATACCCAGCCCC
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CTGGGAGGGTGGATTCTCTTTGTGATGAGGCAGCAACAGCCGAGGTGGTGGAGAAGCAGCAGGAGACCC
CCCTGGCACCTGCAGACTTTGCTCACATCTCCAGGATGCCAGTCCCTGCACTCGGGGGCCAGCCGGAG
GAGCCAGAAGAGGCTTCCAGAGTCCCTCAAAGCAAGCCAGCCACTCGACGACCCTGAAGCTGAGCAACTC
ACCGTAGTGGGAAGATTTCTTCAATCCCAAGGACGTGTGGCCCGGGGCGAGCGGGACTTTCTGTTT
TCCGGGACAGTTTGGAGGACGGGACGTGGCTGTCAAGCGGCTCCTCCGAGTGTCTTGGCCTGGTTCCG
GCGGGAAGTTCAACTGCTGCAGGAGTCTGACAGGCACCCCAACGTGCTCCGCTACTTCTGCACCGAGCGG
GGACCCAGTTCCACTACATTGCCCTGGAGCTCTGCCGGGCTCCTTGCAGGAGTACGTAGAAAACCCGG
ACCTGGATCGCGGGGTCTGGAGCCGAGGTGCTGCTGCAGCAGCTGATGTCTGGCCTGGCCACCTGCA
CTCTTTACACATAGTGCACCGGGACCTGAAGCCAGGAAATATTCTCATACCGGGGCTGACAGCCAGGGC
CTGGGCAGAGTGGTGTCTCAGACTTCGGCCTCTGCAAGAAGCTGCCTGTGGCCGCTGTAGCTTACGCC
TCCACTCCGGCATCCCCGGCACGGAAGGCTGGATGGCGCCGAGCTTCTGCAGCTCCTGCCACCAGACAG
CCCTTTGGAGACAGTCTTTATCGCCAGGCAAACATCCTCACAGGGGCTCCCTGTCTGGCTCACCTGGAGG
AAGAGGTCCACGACAAGGTGGTTGCCCGGACCTGGTTGGAGCCATGTTGAGCCACTGCCGACGCCACG
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GACGTCAGTACTGGCTGGAGAAGGAGTCCGAGCAGGAGCCCTGGTGGGGCACTGGAGGCGGGAGGCT
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GTCCTATAAGGGGACATCAGTGCAGACCTGCTCCGTGCTGTGAGGAACAAGAAGCACCCTACAGGGAG
CTCCAGTTGAGGTGCGACAGGCACTCGGCCAAGTCCCTGATGGCTTCGTCCAGTACTTCACAAACCGCT
TCCCACGGCTGCTCCTCCACACGCACCGAGCCATGAGGAGCTGCGCCTCTGAGAGCCTTCTCTGCCCTA
CTACCCGCCAGACTCAGAGGCCAGGAGCCATGCCCTGGGGCCACAGGGAGGTGA
    
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5' Read Nucleotide Sequence:	>OriGene 5' read for mutant NM_033266 unedited ACGCCCTTCCCGCAACGGGCGGAGGCGTAACGGAGGGAGGACACATAAGCAGAGCACGAACAGCGAACCG TCAGAACAAGTAATACGACACACAATAGGGCGGCCGCGAAAACGGCACCAGCATCGAAGGACCAATGTA CGACACAGAAACGGCCTTTCTCTCTGACCCAGCAGATGGCAGCCTGTACATCTTGGGGACCCAAAAACAA CAGGGATTAATGAAACTGCCATTTACCATCCCTGAGCTGGTTTCATGCCTCTCCCTGCCGAGCTCTGA TGGGGTCTTCTACACAGGCCGGAAGCAGGATGCCTGGTTTTGTGGTGGACCCTGAGTCAGGGGAGACCCA GATGACACTGACCACAGAAGGGTCCCCTCCAACCCCCCGCCTTACATTGCCCGAACACAGTATACGG TCACCATGGCATGAACCAAGAGCCCCAGCCCTGCCGCTGGAACCACCACCTACCCGCGCTACTCAGCC GCCCCCATGGGATGCCTAACCTGGGGAAAATCCATGGACCACCTGGCCGCTCCCTGCCGGATGGGGCC TGGCTGCTAACGTTGGACCCAGAAAGCGGGACGTTCTTTGAACAAGGACCCTGGCGTTGCCTGTGAAT GGCCTTTACCCTGGCACCCAGACGGGCTGGCCAGCTTCGCGATTTTAAGCTGGGTCGGACACTCTGCAA TTCCGCTCTGCTGTGGGCCATTGAATGCCTGCGCTAGGCCCGGAACAACACCCTTTCTACTTGGACA CCACTGCTATAGACCTTAGTGGAGGATAACCGGTCTATGTTTAAGACTGGTCACGATGCCTGTCTTGAT GACTGCCCGATGCCACAGATGTAICTCAGTCAGACCAAGTCAACGACTGGTATCTACGTGCTCACAT
Kinase Domain Sequence:	>SC323535 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation TCATGAGTGTGGCCGCGGGCAGGCGGGACTTTCGTTTTCCGGGGACAGTTTGAGGGACGGGCAGTGG CTGTGATGCGGCTCCTCCGCGAGTGCTTTGGCCTGGTTCGGCGGAAGTTCAACTGCTGCAGGAGTCTGA CAGGCACCCCAACGTGCTCCGCTACTTCTGCACCGAGCGGGACCCAGTCCACTACATTGCCCTGGAG CTCTGCCGGCCTCCTTGCAAGGAGTACGTAGAAAACCCGGACCTG
Restriction Sites:	Please inquire
ACCN:	NM_033266
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell, 2008 May p536-548.
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:	2925 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]
Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (a).