

Product datasheet for **SC100585**

GRPEL2 (NM_152407) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GRPEL2 (NM_152407) Human Untagged Clone
Tag:	Tag Free
Symbol:	GRPEL2
Synonyms:	Mt-GrpE#2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_152407, the custom clone sequence may differ by one or more nucleotides

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ATGGCCGTACGGTCGCTGTGGGCGGCGCGCTGCGGGTGCAGCGCCTACTGGCCTGGAGTGCCGCGTG  
AGAGCAAGGGATGGCCGCTTCCATTCAGCACTGCCACCCAGAGAAGCTGCTGGTGAGGACTGCCGTTCTGA  
GGACCCTCCTGATGAGCTTGGGCCCCCTTGCTGAACGAGCCTTAAGGGTAAAAGCTGTTAAACTGGAG  
AAAGAAGTCCAAGATTTAACAGTGAGATACCAGAGAGCTATAGCTGATTGTGAAAACATAAGGAGGCGAA  
CCCAGAGATGTGTGGAAGACGCCAAGATATTTGGAATCCAGAGTTTCTGTAAAGACTTGGTGAGGTGGC  
TGACATTTTGGAGAAGACTACAGAGTGCATTTCTGAAGAATCGGAGCCTGAGGACCAAAGCTCACTCTG  
GAGAAGGTCTTCCGAGGTTGTTGCTTTTGAAGCAAAGCTGAAAAGTGTGTTTGCCAAGCATGGCCTGG  
AGAAACTGACACCCATTGGTGACAAATATGACCCCATGAGCATGAACTCATCTGTATGTGCCAGCTGG  
TGTTGGGGTGCAGCCTGGCACCGTGGCATTAGTAAGACAAGATGGCTACAACTTCATGGCCGCACCATT  
AGGCTTGCCCGAGTGGAAGTGGCAGTGGAGTCTCAGAGAAGACTGTGA
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_152407 unedited
 TAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGGCAAACCTGAGGCAACAC
 TAACAGCTAATGACCCAGATGGCTCTATTTGGTAATTTACCTACAACCTATTCCACCAG
 CCTTTACTCCTCTGCCCTTTTGTCAATTTTACCTATAATCCTTTATTAATGATGGGAG
 GTGGTGATCAGGACAAAAGTGTTAGGTTCCCATGATTTCTCATTTATTAAATAGTT
 AATGCTGAATTTTTTTTTAAGTTTCTCTGGCTCTATTTATGTTACTTTTTGCGATAAGA
 ACACCTAACATAAGTATTCTCTCTCTTGGCAATTTTTTTTTTTTTTCTGTGTTGCC
 AGGCTGACCTCCAACCTCTGGGCCAAGCAATCCTGCCTCAGCCTGCCAAGTAGCTAGGA
 CTACAGGCGTTCACTGCGCCCGCAAAGTTTTTTTGTGTTTTTTTTTTAAGTTGGT
 ACTCACAATCACTACCTCTGTTATATTGACAAGCTCTATTTCTATTCTTTGTATCTGT
 TAAGTCACATCTGTGAAACATTGAGCTCACCTTTTATATTAACCTCTAGAATTAATG
 GGCCTATGTGGTTTTTTTTCAGTCTTATAGCTGGTGTCTGTAAGAAATTTGTCCAATAA
 ACGACTTAATGAATGATACATCAGTCAGATTTTAGGAAGGCAGTCAATTATGGATATTTT
 AATGTTGAAGAAGCCTTAATGATCAAATCTCACCTTTCTGCTTCTGAATATGAAAATC
 TAGTCTTTTTAGGACTGGNCACAAGGAAAATATCTCTAACTATTGACTAAAATCCAGNG
 AGAGTATGAATGAAGAACAAGACTAGATATTATGGTCATCATTAGAAATAATGGGCATGCCAT
 TAAGTCTCCATTTAAGATAATGGCCTGCCATGAAAC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_152407 unedited
 TACAGCTATGNNACCGCGGCCGCAATCTANGATCGAGTTTTTTTTTTTTTTTTTTTATTTT
 AATTCAGTTTTTATAAAGTTGTTTCTGATATTTTTTCTCAGTGATCCTTGTCTGATG
 AATATTACATTTTATCCTTAGTTTTGCTCATTGATTTTGTCTTTAGTGTAAAGAACTT
 TTATTTATCAAATCCTTTGCCATGAATGAGAGCACCAAATAACATATCAATACCAACTG
 CCTGATTCCTTTACAGCAGTAAGAAAAGTCAGTAAAACATTTGTACAGTCCAAGTACTAC
 AACACCAAGATCCCTCTTCAAGTGAGAGTGAGCCAAAGCTTCTTAGTATCATCTCAAG
 TCAATGTCTTTTCACTATACCATTAAGATGAAAATAACTAAGAGCACTGACACAATTTTC
 TTGCTCTTTCCATCTAAAAATGTGGGTTTCTGTGGTGTGGCTAATTTTAAAAACAGAA
 AATGGAAGGAAAATAAGTCAGTGAATGATTAGCTTACAAGTTTTTCTACTCATCATTA
 CCAGTCTTCCCTTTTCCCTAGACTTTAGACAGCCATAAAAAGGCAGGAAAAACAATGTGC
 ATAATAAAAAAATAAAAAATAATCTGAGCACCTACTGTAGTAGGCATTTAACACATTT
 CACTTAATCCTCACAACGCTGTGAAAGGATTATTATAATCATTTTACGAATAAAGAAACA
 GGCTCAGAAAAGGTGAAATCACTGGTGCCTTAAGTCTGCAAGTACTGAGCTGAGATTTA
 AGTCAAGCCCATGCCTCTATATGCTGGTTTGGCTCCCAAAACCTTCAGCTTGAAATCT
 TACTACTATACCTTACCTCCTAATCTTAAATCACCTTTAATCCGCCAACTCCTGAT
 TAACCAAGAACCTAAATTATCCTGGATTTCTGCCCA

Restriction Sites:

NotI-NotI

ACCN:

NM_152407

Insert Size:

2700 bp

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).

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:

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_152407.1](#), [NP_689620.1](#)

RefSeq Size: 4105 bp

RefSeq ORF: 366 bp

Locus ID: 134266

UniProt ID: [Q8TAA5](#)

Cytogenetics: 5q32

Gene Summary: Essential component of the PAM complex, a complex required for the translocation of transit peptide-containing proteins from the inner membrane into the mitochondrial matrix in an ATP-dependent manner. Seems to control the nucleotide-dependent binding of mitochondrial HSP70 to substrate proteins. Stimulates ATPase activity of mt-HSP70. May also serve to modulate the interconversion of oligomeric (inactive) and monomeric (active) forms of mt-HSP70 (By similarity).[UniProtKB/Swiss-Prot Function]