

Product datasheet for **MR207470**

Ero1lb (NM_026184) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ero1lb (NM_026184) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ero1lb
Synonyms:	1300013B24Rik; 1700065B09Rik; AI447560; ero1-beta; Ero1b
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR207470 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGTCCGGGGTTCGCGGGCCGTTACTGGGAGGGGGCGCGCCGGTGC AACTGCTTGTACCC
 TGAGTTCCTCTCAAGTCTGGTCAAGACTCAGGTGACTGGAGTTCTGGATGATTGCTTATGTGACATTGA
 CAGCATTGATAAAATCAACACCTACAAAATCTTCCAAAATAAAGAAGTTACAAGAACGAGACTATTTT
 CGTTATTACAAGGTTAATCTGAAACGACCATGTCTTTCTGGGCAGAAGATGGCCACTGCTCAATAAAAG
 ACTGTCATGTGGAGCCCTGTCCAGAAAGTAAAATCCAGTTGGAATTAAGCCGGGCGTTCAAATAAGTA
 CTCGCAAGCAGCAAACAGCACCAAGAAGTGGATGACTGTGAGCAGGCTAACAACTGGGCGCCATCAAC
 AGCAGCGTAAGTAACGAAAGCAAAGAAGCGTTCATTGACTGGGCGAGATATGATGATTCGAGGACCACT
 TTTGTGAAGTTGATGATGAGCGTCTCCTGCTGCACAGTATGTGGACCTGCTGTAACCCGGAACGGTA
 CACTGGCTACAAGGGCTCCTCAGCATGGAGGGTGTGGAACAGCATCTATGAAGAAAAGTCTTCAAGCCT
 CGATCTGTTTATCGTCTTTAAATCCTTTGGCGCCAGCAGAGGGGAAGATGATGGAGAATCATTCTATA
 CGTGGCTAGAAGTTTGTGCTTGTGAGAAAAGTCTTCTATAAGCTTATATCAGGACTCCATGCCAGCAT
 CAATTTACATCTGTGTGCAAACTACCTTCTGGAAGAACTGGGGGAAACCTAGTTGGGGACCAAACATC
 AAGGAGTTTAGACGCCGCTTTGACCCTGTGAAACAAAGGGGAAAGTCCAAGGAGGCTAAAGAACCTGT
 ACTTTTATACTTGATAGAGCTCCGTGCTTTGTCAAAGTGGCCCTTACTTTGAGCGCTCGATTGTTGA
 TCTCTATACTGGCAATGTGGAAGATGATGCCGACCAAGACCTTCTGCTCAGCATCTTTCAGGATACA
 AAGTCTTTCCATGCACTTCGATGAGAAATCCATGTTTGCAGGTGACAAAAAGGGGCAAGTCATTAA
 AGGAAGAATTCCGGTTACATTTCAAGAACATCTCCCGATCATGGACTGTGTTGGTGCGATAAAATCGAG
 ACTGTGGGGGAACTGCAGACTCAGGGTTTAGGAACTGCCTTGAAGATCCTCTTCTGAAAAGGAAATC
 CAAAACCTTCCGGAGAACAGCCATCCAAGGCTTCCAGCTCACTCGGCAGGAAATCGTTGCTCTTTTAA
 ATGCTTTTGAAGACTTTCTACAAGCATAAGAGAATTACAGAAGTAAAGCGTTGTTGCAGCACAGGAG
 G

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR207470 protein sequence
 Red=Cloning site Green=Tags(s)

MSPGFRAVVTGQAAAAVQLLVLSFLSSLVKTQVTGVLDDCLCDIDSIDKFNTYKIFPKIKKLQERDYF
 RYYKVNLRPCPFWAEDGHCSIKDCHVEPCPEKIPVGIKAGRSNKYSQAANSTKELDDCEQANKLGAIN
 STL SNESKEAFIDWARYDSDHFCELDERSPAAQYVDLLNPERYTYGKSSAWRVWNSIYEENCFKP
 RSVYRPLNPLAPSRGEDDGE SFYTWLEGLCLEKRVFYKLISGLHASINLHLCANYLLEETWGPSPWPN
 KEFRRRFDPVETKGEPRRLKNLYFLYLIELRALSKVAPYFERSIVDLTYGNVEDDADTKLTLSSIFQDT
 KSFPMHFDEKSMFAGDKKGAKSLKEEFLHFKNISRIMDCVGDKCRLWGKLQTLGLTALKILFSEKEI
 QNLPENSPSKGFQLTRQEI VALLNAFGRLSTSIRELQNFKALLQHRR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_026184

ORF Size: 1404 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:

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_026184.2](#), [NP_080460.2](#)

RefSeq Size: 4255 bp

RefSeq ORF: 1404 bp

Locus ID: 67475

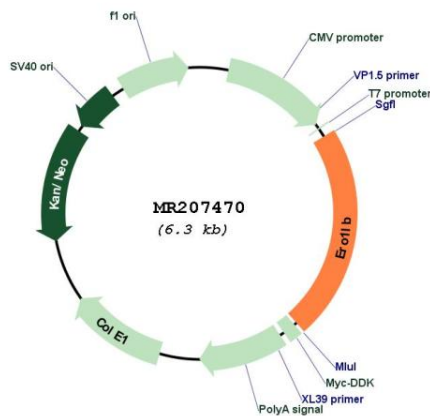
UniProt ID: [Q8R2E9](#)

Cytogenetics: 13 A1

MW: 53.5 kDa

Gene Summary: Oxidoreductase involved in disulfide bond formation in the endoplasmic reticulum. Efficiently reoxidizes P4HB/PDI, the enzyme catalyzing protein disulfide formation, in order to allow P4HB to sustain additional rounds of disulfide formation. Other protein disulfide isomerase family members can also be reoxidized, but at lower rates compared to P4HB, including PDIA2, PDIA3, PDIA4, PDIA6 and NXNDC12. Following P4HB reoxidation, passes its electrons to molecular oxygen via FAD, leading to the production of reactive oxygen species (ROS) in the cell (By similarity). Involved in oxidative proinsulin folding in pancreatic cells, hence required for glucose homeostasis in vivo.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR207470