

Product datasheet for MR206386

Erp44 (NM_029572) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Erp44 (NM_029572) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Erp44
Synonyms:	1110001E24Rik; AI849526; AL033348; Txndc4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR206386 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAATCTCGGGTCTTCTGTCTTTAGCAGACCTCAGATGCTCCTTGCTGCTCCTGGTAACTTCAATTT
TTACACCTATAACAGCTGAAATAGCAAGTCTTGATTGAGAGAATATAGATGAAATTTTAAATAATGCTGA
TGTTGCTTTAGTAAATTTTATGCTGACTGGTGTCTGTTTCAGCCAGATGTTGCATCCAATTTTGGAGAA
GCATCTGATGTCATTAAGGAAGAATATCCAGATAAAAAATCAAGTAGTGTGGCCAGAGTTGATTGTGATC
AGCACTCTGATATAGCCAGAGGTACAGGATAAGCAAATACCAACCCTGAAATTTTCGTAATGGAAT
GATGATGAAGAGAGAATACAGGGGCCAGCGATCAGTGAAAGCGCTTGCAGACTACATCAGGCAACAGAAA
AGTAACCCAGTCCACGAGATTCAGAGTCTAGATGAAGTCAACCAATCTTGATCGCAGTAAGAGAAATATCA
TTGGATACTTTGAGCAGAAGGATTCAGAAAATTACAGAGTTTTTAAAAGAGTAGCAAGTATTTTGCATGA
TGACTGTGCCTTCCTTTCTGCTTTTGGAGATCTTTCAAACCAGAAAAGGTACAACGGAGACAATGTAATC
TACAAACCACCCGGCGTTCTGCGCCAGACATGGTGTACTTGGGATCTATGACAAATTTTGTGTAACCT
ACAACCTGGATTCAAGATAAATGTGTCCCTCTTGTCCGAGAAAATACATTTGAAAATGGAGAGGAATTGAC
AGAAGAAGGACTGCCTTTTCTCATACTCTCCACATGAAGGATGATACAGAAAAGTTTGAATAATTTCCAG
AATGAAGTAGCCCGCAGTTGATAAGTAAAAAGGTACAATAAATTTCTTACATGCAGATTGTGACAAAT
TTAGACATCCTCTTCTCCATATCCAGAAAACGCCAGCAGATTGCCCTGTATAGCCATTGACAGTTTTAG
GCATATGTATGTTTTGGAGACTTTAAGGATGTATTAATTCCTGGAAAATCAAGCAGTTTTGATTTGAC
CTACATTTCTGAAAATTACACAGAGAATTCATCACGGACCTGACCCGACTGACACAGCCCCAGGAGAGC
AAGACCAGGATGTAGCGAGCAGTCTCCAGAGAGCTCCTCCAGAAGCTGGCGCCAGCGAGTATAGGTA
TACTTTATTGAGGGATCGAGATGAGCTG

ACGCGTACGCGGCCGCTCGAGCAGAAAATCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR206386 protein sequence
 Red=Cloning site Green=Tags(s)

MNPAVFLSLADLRCSLLLLVTSIFTPITAEIASLDSENIDEILNNADVALVNFYADWCRFSQMLHPIFEE
 ASDVIKEEYPDKNQVVFARVDCDQHSIDIAQRYRISKYPTLKLFRNGMMMKREYRGQRSVKALADYIRQQK
 SNPVHEIQSLDEVTLNDRSKRNIIGYFEQKDSENYRVFERVASILHDDCAFLSAFGDLSKPERYNGDNVI
 YKPPGRSAPDMVYLGSMTNFDVTYNWIQDKCVPLVREITFENGEELTEEGLPFLILFHMKDDTESLEIFQ
 NEVARQLISEKGTINFLHADCDKFRHPLLHIQKTPADCPVIAIDSFHRMYVFGDFKDVLIIPGKLLQFVFD
 LHSGKLHREFHHGPDPTDTAPGEQDQDVASSPPESSFQKLAPSEYRYTLLRDRDEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_029572

ORF Size: 1221 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_029572.3](#)

RefSeq Size: 2647 bp

RefSeq ORF: 1221 bp

Locus ID: 76299

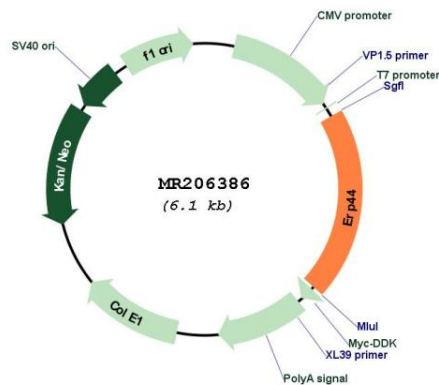
UniProt ID: [Q9D1Q6](#)

Cytogenetics: 4 B1

MW: 46.9 kDa

Gene Summary: Mediates thiol-dependent retention in the early secretory pathway, forming mixed disulfides with substrate proteins through its conserved CRFS motif. Inhibits the calcium channel activity of ITPR1. May have a role in the control of oxidative protein folding in the endoplasmic reticulum. Required to retain ERO1A and ERO1B in the endoplasmic reticulum (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR206386