

Product datasheet for **MG206386**

Erp44 (NM_029572) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Erp44 (NM_029572) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Erp44
Synonyms:	1110001E24Rik; AI849526; AL033348; Txndc4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG206386 representing NM_029572 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**C

ATGAATCCTGCGGTCTTCTGTCTTTAGCAGACCTCAGATGCTCCTTGCTGCTCCTGGTAACTTCAATTT
 TTACACCTATAACAGCTGAAATAGCAAGCTTGATTGATCAGAGAATATAGATGAAATTTTAAATAATGCTGA
 TGTTGCTTTAGTAAATTTTATGCTGACTGGTGTCTGTTTCAGCCAGATGTTGCATCCAATTTTGGAGAA
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 GATGATGAAGAGAGAATACAGGGGCCAGCGATCAGTGAAAGCGCTTGCACTACATCAGGCAACAGAAA
 AGTAACCCAGTCCACGAGATTCAGAGTCTAGATGAAGTACCAATCTTGATCGCAGTAAGAGAAATATCA
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 ACAACTGGATTCAAGATAAATGTGTCCCTCTGTCCGAGAAATAACATTTGAAAATGGAGAGGAATTGAC
 AGAAGAAGGACTGCCTTTTCTCACTCTTCCACATGAAGGATGATACAGAAAGTTTGAATATTTCCAG
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 CTACATTCTGAAAAATTACACAGAGAATTCATCACGGACCTGACCCGACTGACACAGCCCCAGGAGAGC
 AAGACCAGGATGTAGCGAGCAGTCTCCAGAGAGCTCCTCCAGAAGCTGGCGCCAGCGAGTATAGGTA
 TACTTTATTGAGGGATCGAGATGAGCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG206386 representing NM_029572
 Red=Cloning site Green=Tags(s)

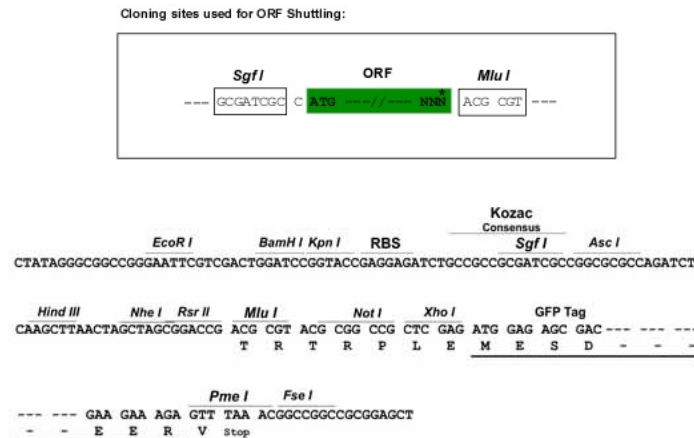
MNPAVFLSLADLRCSLLLLVTSIFTPTAEIASLDSENIDEILNNADVALVNFYADWCRFSQMLHPIFEE
 ASDVIKEEYPDKNQVVFARVDCDQHSIDIAQRYRISKYPTLKLFRNGMMMKREYRGQRSVKALADYIRQQK
 SNPVHEIQSLDEVTLNDRSKRNIIGYFEQKDSENYRVFERVASILHDDCAFLSAFGDLKSPERYNGDNVI
 YKPPGRSAPDMVYLGSMTNFDVTYNWIQDKCVPLVREITFENGEEELTEEGLPFLILFHMKDDTESLEIFQ
 NEVARQLISEKGTINFLHADCDKFRHPLLHIQKTPADCPVIAIDSFHMYVFGDFKDVLIIPGKLGQFVFD
 LHSGKLHREFHHGPDPTDTAPGEQDQDVASSPPESSFQKLAPSEYRYTLLRDRDEL

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_029572

ORF Size: 1218 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_029572.3](#)

RefSeq Size: 2647 bp

RefSeq ORF: 1221 bp

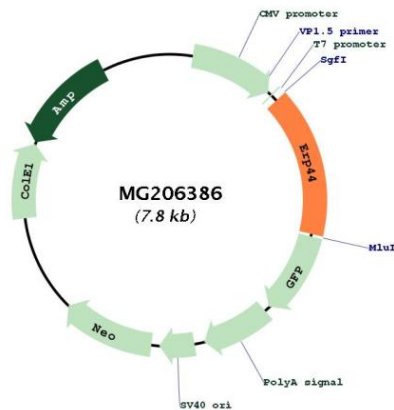
Locus ID: 76299

UniProt ID: [Q9D1Q6](#)

Cytogenetics: 4 B1

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 MG206386