

Product datasheet for **MR208373**

Ears2 (NM_026140) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ears2 (NM_026140) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ears2
Synonyms:	3230401I01Rik; mKIAA1970
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR208373 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGCGCCCTCAAGAGGCTTCTGCTGGCCGAGCCGACGTGGTGGCCCTCGGGACCGCGTGGGGC
 GCGCGAGGCCAGTCTGGGCCAGATCCCGGGGCCCGGTGCGAGTGCCTTCGCTCCAGCCCCACAGG
 TTCCTGCACCTGGGTGGCTCCGTAAGTCCCTCTACAACCTACATCTTTGCCAAGAAGCACCAAGGAGC
 TTCATTCTGAGGCTGGAGGACACCGATCAGAGCCGCTTGGTGCCAGGGGACAGAAAGCATTGAGGACA
 TGCTGGAGTGGCAGGCATCCCACCTGATGAGAGTCCCCGCCGGGTGGTCTGCAGGGCCCTACTGTCA
 GTCCAGCGGCTGGCTCTGTATGCCAAGCCACGGAAGCCTTGTGAGATCTGGAGCTGCCTATCCCTGT
 TTCTGTTTCCACAGCGGCTGGAGCTTCTGAAGAAGGAAGCACTGAGGAGCCGACAGACACCCCGGTATG
 ACAATCGGTGCCGAACCTGAGCCAGGCACAGGTGGCCAGAAGCTGGCCGTAGACCCCAAGCCTGCTAT
 CCGCTTCCGTCTAGAGGAGGCAGTACCAGCCTTCCAGGACCTGGTATATGGCTGGACTCAGCATGAAGTG
 GCCAGTGTGGAGGGGACCCAGTTATCCTGAAAAGTGACGGCTTCCACCTACCACTAGCCTGTGTGG
 TAGATGACCACCACATGAGCATCAGCCATGTGCTGCGGGGCTCCGAGTGGCTAGTCTCCACCTCCAAGCA
 CCTGCTCCTTACCAGGCCCTGGGCTGGCAGCCACCTCGATTTGCTCATCTGCCCTGCTCCTCAACAGG
 GATGGTAGCAAGCTGTCTAAGAGGCAAGGGGACATTTTCTGGAACATTTTGTGCCACCGGTTTTCTGC
 CAGAAGCCTTGCTTGACATCATCACTGTGGCTCGGGGTTTGCAGAGAACCAATGGGCAGGACCCCT
 GCCGGAGCTGATTACACAGTTTGACCTGACCGGATCACCTGCCACTCAGCCCTGCTGGACCTAGAGAAG
 CTCCCAGAATTTAACAGGCTGCACCTCCGCCGGCTGGTGGAGCAGTGAACCCAGAGGCCCAAGTTGGTGG
 AGAAATTCAGGGCCTGGTGAAGGAGCATTCCGGAGTGAATGCAAAAACAAGGATGTTCTGGACCCTGC
 ATATATGGAGAGGATCCTCCTGCTGAGACAGGGTACATCAGCCGCTGCAGGATCTGGTCTCCCAAGTG
 TACTCCTACTTATGGACCCGCCCTGCTGTCCATCGATCAGAAGTGGTGGCAGCTCGAAAAACGTGGATG
 TGATTGCCAAGCCTTGCTGGGGCTTTTAGAAAGACCTGGCTTAAGCCTAACTCAGGATGTGCTGAACAG
 AGAGCTGAAGAAGCTGTGAGAAGGTCTGGAAGGCGCAAGCATAGCAGTGTGATGAAGCTCCTCCGGATG
 GCCCTCAGTGGACAGCTGCAAGGACCCCTGTGGCTGAGATGATGGTGTCTTGGGCCAAAGGAAGTAC
 GGAACGAATCCAGAAGGTGCTTTCTAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR208373 protein sequence
 Red=Cloning site Green=Tags(s)

MAAPLKRLLLAEPHVVALGHRVGRREASLGPDPGAPVVRVRFAPSPGFLHLGGLRRTALYNYIFAKKHQGS
 FILRLEDTDQSRLVPGAESIEDMLEWAGIPPDESPRRGGPAGPYCQSQRLLALYAQATEALLRSGAAYPC
 FCLPQRLELLKKEALRSRQTPRYDNRNLSQAQVAQKLAVDPKPAIRFRLEEAVPAFQDLVYGWQHEV
 ASVEGDPVILKSDGFPTYHLACVDDHMSISHVLRGSEWLVSSTKHLLEYQALGWQPPRFAPLPLLLNR
 DGSKLSKRQGDIFLEHFAATGFLPEALLDIITNCGSGFAENQMGRTPELITQFDLTRITCSALLDLEK
 LPEFNRLHLRRLVSSETQRPQLVEKLQGLVKEAFGSELQNKDVLDPAYMERILLRQGHISRLQDLVSPV
 YSYLWTRPAVHRSELGASSENVDVIKRLLGLLERPGLSLTQDVLNRELKRLSEGLEGAKHSSVMKLLRM
 ALSGQLQPPVAEMMVS LGPKEVRERIQKVLSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_026140

ORF Size: 1572 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_026140.3](#)

RefSeq Size: 1862 bp

RefSeq ORF: 1572 bp

Locus ID: 67417

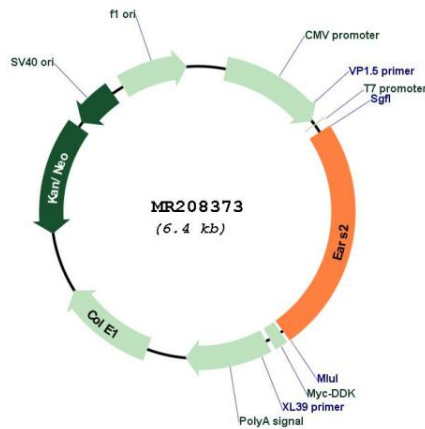
UniProt ID: [Q9CXJ1](#)

Cytogenetics: 7 F2

MW: 58.3 kDa

Gene Summary: This gene encodes a putative member of the class I family of aminoacyl-tRNA synthetases. These enzymes play a critical role in protein biosynthesis by charging tRNAs with their cognate amino acids. This protein is encoded by the nuclear genome but is likely to be imported to the mitochondrion where it is thought to catalyze the ligation of glutamate to tRNA molecules. Mutations in a similar gene in human have been associated with combined oxidative phosphorylation deficiency 12 (COXPD12). [provided by RefSeq, Mar 2015]

Product images:



Circular map for MR208373