

## Product datasheet for **RR210593**

### Rars (NM\_001105777) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Rars (NM_001105777) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rars
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RR210593 representing NM\_001105777  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGACGGTCTGGTGGCTCAGTGTCCGCGCGGTTGCTGCAGCAGAAAAGGAGATTAATCTCTGACTG  
CTGAGATCGACCGCTGAAGAAGCTGAGTTACTTAGAAGCTTCTCCAAGTTTGGAAACAGTTACGAGAAGA  
AAATTTAAATGAAGTATAGGCTGAATATTCTTGAAGGAGTCTTCAGGCAGAAAAGAAAAGGCCGACT  
AAGAACATGATCAACATCAACAGTCGCCTGCAGGAGCTTTCGGCTGTGCCATTAAGGCTGCGTATCCAG  
ACTTGGAGAACCCTCCCCTGGTGTAAACCAAGTCAGCAGCCCAAGTTTGGAGACTATCAATGTAATAG  
CGCCATGGGTATTTCTCAGATGCTCAAGGCAAAGGAGCAGAAGGTTAGTCTAGAGAAATGCCGAAAAC  
ATTACCAAACACCTGCCAAACAACGAGTACATCGACAGGGTTGAAATTGCGGGTCCCGGTTTCATCAATG  
TGCACCTGAGAAAAGGACTTTGTGTGAGAACAGTTAACCAATCTCCTAGTGAATGGAGTTCAACTACCTGT  
GCTTGGAGAAAATGAAAAGGTGATAGTTGACTTCTCCTCTCCCAACATAGCTAAGGAGATGCACGTTGGC  
CACCTCAGGTCAACCATATAGGAGAAAAGTATGAGCCGCCTCTTTGAGTTTGCAGGATACAACTGCTAA  
GGTTAAACCACGTAGGAGACTGGGGACCCAGTTTGGCATGCTCATCGCTCACCTGCAGGATAAGTTTCC  
AGATTATCTGACAGTTTCACCTCCTATTGGGGATCTTCAGGCCTTTTATAAGGAATCTAAGAAGAGGTTT  
GATACCGAGGAGGAGTTTAAAGAGCGAGCCTATGAGTGTGTTGTTTTGCTGCAGAGTAAAAACCCAGATA  
TCATGAAAGCCTGGAATCTCATCTGTGATGTGCCAGGGAAGAGTTTAAATAAATCTATGATGCACTGGA  
CATCACTTTGATAGAAAGAGGAGAATCCTTCTATCAAGATAGGATGAAGGATATTGTAAGGAATTTGAA  
GATAAAGGTTTGTGCAGGTGGATGATGGCAGGAAAATGTGTTGCTGCCTGGGTGTTCTGTACCATTA  
CAATAGTAAAATCAGATGGGGGCTACACTTACGACACCTCTGACCTGGCTGCCATCAAACAGAGGCTATT  
TGAAGAAAAGCAAATAAGATTATTTATGTGGTGGACAATGGACAAGCTACACACTTCCAGACAGTATTT  
GCTGCTGCTCAAATGATTGGTTGGTATGACCCTAAAGTACTCGAGTGGCCACGTTGGATTGGTGTGG  
TCCTAGGAGAAGACAAGAAGAAATTTAAACACGTTTCAAGTGAAGTGTGCGCCTCATGGACCTGCTGGA  
AGAAGGACTGAGACGGTCCATGGACAAGCTGAAGGAGAAAAGAGAGAGACAAGGTCTTAACTGAAGAGGAG  
TTGAAGGCAGCTCAGACATCCGTTGCATATGGCTGCATCAAATACGCCGACCTTTCTATAATCGCCTGA  
ATGACTACGTCTTCTCCTTTGATAAGATGCTGGACGACAGAGGGAACACAGCTGCCTACCTACTGTACGC  
CTTCACCAGAATCAGGTCCATTGCACGCCTGGCCAATATCGATGAGGAAATGCTGCAGAGAGCAGCTCGG  
GAAACCAAGATCATTTTGGACCACGAGAAGGAGTGGAAACTGGGACGGTGCATTTTACGGTTCCTCGAAA  
TCCTACAGAAGATCTTAGATGACCTGTTTCTCCCACTCTGTGTGATTACATTTATGAGCTAGCAACCAC  
TTTCACAGAGTTCTATGACAGCTGCTACTGTGTGGAGAAAAGATCGGCAGACTGGGAAAGTGTGAAGGTG  
AACATGTGGCGGATGCTCCTGTGTGAAGCCGTAGCTGCTGTCATGGCAAAGGCTTCGATATACTGGAA  
TAAAGCCCGTCCAGAGGATG

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RR210593 representing NM\_001105777  
Red=Cloning site Green=Tags(s)

MDGLVAQCSARLLQQEKEIKSLTAEIDRLKNCSYLEASPSLEQLREENLKLKYRLNILRRSLQAERKRPT  
 KNMININSRLQELFGCAIKAAYPDLENPLVVTSPSQPKFGDYQCNSAMGISQMLKAKEQKVSPIEAEN  
 ITKHLPNNEYIDRVEIAGPGFINVHLRKDFVSEQLTNLLVNGVQLPVLGENEKVIVDFSSPNIKEMHVG  
 HLRSTIIGESMSRLEFAGYNVLRNLNHVGDWGTQFGMLIAHLQDKFPDYLTVPSPPIGDLQAFYKESKKRF  
 DTEEEFKRAYECVLLQSKNPDIMKAWNLICDVSREEFNKIYDALDITLIERGESFYQDRMKDIVKEFE  
 DKGFVQVDDGRKIVFVPGCSVPLTIVKSDGGTYDTSDLAAIKQRLFEEKANKIIVVDNGOATHFQTVF  
 AAAQMIGWYDPKVTRVAHVGFVVLGEDKKFKTRSGETVRLMDLLEEGLRRSMCLKKERDKVLTEEE  
 LKAAQTSVAYGCIKYADLSHNRLNDYVVSFDKMLDDRGNATAAYLLYAFTRIRSIARLANIDEEMLQRAAR  
 ETKIILDHEKEWKLGRCILRFPEILQKILDDLFLHTLCDYIYELATTFTEFYDSCYCVKEKDRQTKGVLKV  
 NMWRMLLCEAVAAMAKGFDILGIKPVQRM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001105777

**ORF Size:** 1980 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\\_001105777.2](#), [NP\\_001099247.2](#)

**RefSeq Size:** 2122 bp

**RefSeq ORF:** 1983 bp

**Locus ID:** 287191

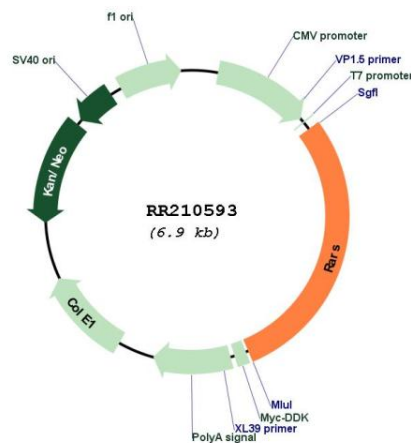
**UniProt ID:** [P40329](#)

**Cytogenetics:** 10q12

**MW:** 75.8 kDa

**Gene Summary:** Forms part of a macromolecular complex that catalyzes the attachment of specific amino acids to cognate tRNAs during protein synthesis. Modulates the secretion of AIMP1 and may be involved in generation of the inflammatory cytokine EMAP2 from AIMP1.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for RR210593