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Product datasheet for RR212669

Qars (NM_001007624) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Qars (NM_001007624) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Qars
Synonyms:	GlnRS; RGD1562301
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RR212669 representing NM_001007624
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTACTCCGGATTCGCTGGCGCTGTTCACCGGCCTTGGCCTTAGCGAAAACAAGGCCCGCGAGACTC
TCAAGAACGCGGCTTTGAGCACTCAGCTGCGCGAGGCGGCGACCCAGGCACAGCAGACTCTAGGGTCTAC
CATCGACAAGGCTACTGGGACCCTGCTATATGGCTTGGCCTCCCGACTCAGGGATACTCGGCGTCTTTCT
TTCCTTGTGGGCTATATAGCCAATAAGAAGATCCACACTGAGCTCCAGCTGAGCGCTGCTCTTGAATATG
TTCGGAGTCATCCCCTGGATCCCATTGATACCAAGGACTTCGAGCAGGAATGTGGTGTTGGTGTGGTGGT
GACACCAGAGCAGATTGAGGAAGCTGTGGAGGCCACCATAAATAGGCATCGTCCACAGCTCTTAGTGGAA
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CGTAGGGGTCAAGCTTATGTTTGTCATCAGAGAGGGGAAGAGCTCAAAGGCCATAACCCTTTACCTTCAC
CATGGAGAGACCGGCCTATTGAGGAATCCTTGCTGCTCTTTGAGGCAATGCGAAAGGGCAAATTTGCAGA
GGGTGAGGCCACGCTTCGAATGAAGTTGGTGATGGAAGATGGAAAGATGGACCCTGTGGCCTATCGAGTC
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TCTGTGATTCCATCGAGCACATCACCCACTCACTGTGTACCAAGGAATTCCAGGCTCGACGGTCTTCCTA
CTTTTGGTTGTGTAATGCACTGGATGTCTACTGCCCTGTCCAGTGGGAATATGGCCGCCTCAATCTGCAC
TATGCTGTTGTCTCAAAGCGGAAGATTCTCCAGCTTGTGGCAGCTGGTGCTGTTCGGGACTGGGATGACC
CACGGCTCTTCACACTTACTGCCCTACGACGACGGGGTTTTCCACCTGAGGCCATCAACAACTTCTGTGC
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GTACTTCTCTGTGGATCCGGATAGCCATCAAGGACAGGTTGTCTTCAACCGAACAGTCACACTCAAAGAA
GACCCAGGCAAAGTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR212669 representing NM_001007624
Red=Cloning site Green=Tags(s)

MATPDSLALFTGLGLSENKARETLKNAALSTQLREAATQAQQTLGSTIDKATGTLLYGLASRLRDTRRLS
FLVGYIANKKIHTELQLSAALEYVRSHPLDPIDTKDFEQECGVGVVVTPEQIEEAVEATINRHRPQLLVE
RYRFSMGLLMGEARAALRWADGKMIKNEVDMQVLHLLGPKMEADLEKKPKVAKARLEETDRKTAKDVVEN
GEVAGQTLSLMEQLRGEALKFHKPGENYKTPGYVTTPHTMDLLKQHLEITGGQVRTRFPPEPNGILHIGH
AKAINFNFGYAKANNGICFLRFDDTNPEKEEAKFFTAIYDMVTWLGYTPYKVTYASDYFDQLYAWAVELI
RRGQAYVCHQRGEELKGHNPLPSPWRDRPIEESLLLFEAMRKGKFAEGEATLRMKLVMEDGKMDPVAYRV
KYTPHHRTGDKWCIYPTYDYTHCLCDSIEHITHSLCTKEFQARRSSYFWLCNALDVYCPVQWEYGRLNLH
YAVVSKRKILQLVAAGAVRDWDDPRLFTLTALRRRGFPPEAINNFCARVGVTVAQTTMEPHLLEACVRDV
LNDTAPRAMAVLEPLQVVITNFPAPKPLDIRVPNFPADETKGFHQVPFASTVFIERTDFKEESEPGYKRL
AWGQPVGLRHTGYVIELQHVVRGSSGCVECLEVTCRRADAGEKPKAFIHWVSQPLVCEIRLYERLFQHKN
PEDPVEVPGGFLSDLNPASLQVIKGALVDCSVALAKPFDKFQFERLGYFSVDPDSHQGQVVFNRTVTLKE
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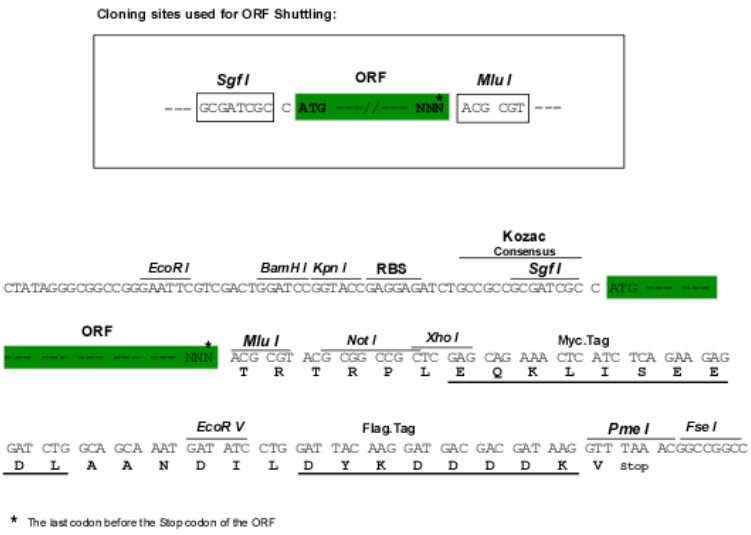
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

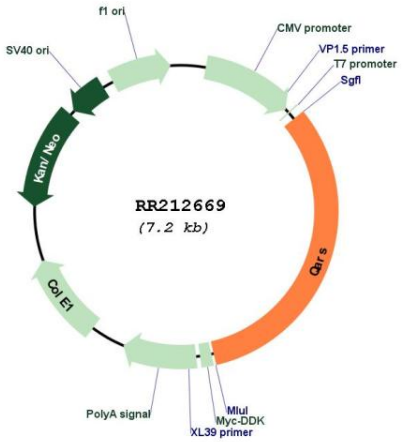
Cloning Scheme:



ACCN:	NM_001007624
ORF Size:	2325 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_001007624.1, NP_001007625.1
RefSeq Size:	2794 bp
RefSeq ORF:	2328 bp
Locus ID:	290868
UniProt ID:	Q66H61
Cytogenetics:	8q32
MW:	87.7 kDa
Gene Summary:	Glutamine--tRNA ligase. Plays a critical role in brain development.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR212669