

Product datasheet for **RR217268**

Ago1 (NM_001191765) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ago1 (NM_001191765) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ago1
Synonyms:	Eif2c1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR217268 representing NM_001191765
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAAGCGGGACCCTCGGGAGCAGCTGCAGGTGCTACCTGCCTCCCCTGCAGCAGGTGTTCCAGGCC
 CTGCGCGGCTGGCATCGGCACTGTGGCAAACCGATCAAGCTTCTGGCCAATTACTTTGAGGTGGACAT
 TCCTAAGATTGACGTCTACCATTACGAGGTGGACATCAAGCCGGATAAGTGTCTCGCAGAGTCAACCGG
 GAGGTGGTGGAGTACATGGTCCAGCATTCAAACCGCAGATCTTTGGGGATCGCAAGCCTGTGTACGATG
 GAAAGAAGAACATTTACACAGTTACAGCACTGCCTATTGGCAATGAGAGGGTTGACTTTGAGGTGACCAT
 CCCTGGGAAGGGAAGGATAGAATTTTTAAGGTCTCCATCAAGTGGCTAGCCATCGTGAGCTGGCGCATG
 CTGCATGAAGCCTTGGTCAGTGGCCAGATCCCTGTGCCCTTGGAGTCCGTGCAAGCCTGGATGTGGCCA
 TGAGGCATCTGGCATCTATGAGGTACACCCCTGTGGGCCGCTCCTTCTTCTCACCCTGAGGGCTACTA
 CCACCCGCTGGGGGTGGGCGCAGGTCTGGTTCGGCTTTCACCAGTCTGTGCGCCCTGCCATGTGGAAG
 ATGATGCTCAACATTGATGTCTCAGCCACTGCCTTCTACAAAGCACAGCCAGTGATTGAGTTCATGTGTG
 AGGTCTGGACATCAGGAACATAGATGAACAGCCCAAGCCCTCACGGATTCCCAGCGGTTTCGGTTTAC
 CAAGGAGATAAAGGGCTGAAGGTGGAAGTGACCCACTGTGGACAGATGAAGAGGAAATACCGCGTGTGT
 AATGTTACCCGTCGCCCTGCTAGCCATCAGACGTTTCCCTTGCAGCTGGAGAGCGGACAGACCGTGGAGT
 GCACCGTGGCACAATATTTCAAGCAGAAATACAACCTTCAAGTCAAGTATCCTCACCTGCCCTGCCTGCA
 AGTTGGCAAGAGCAGAAGCATACTATTTGCCCTCGAGGTCTGTAACATTGTGGCTGGCAGCGGTGC
 ATTAAGAAGCTGACTGACAACAGACTTCAACCATGATAAAGGCTACAGCTAGGTGGCCCCAGACAGAC
 AGGAGGAGATCAGTCGCCTGATGAAGAAGCAGCTACAACCTGGATCCCTACATCCAGGAATTTGGAAT
 CAAAGTGAAGGATGACATGACGGAGGTGACGGGGCAGTGTGCCGGCGCCCATCTTGAGTACGGCGGC
 CGGAACCGGGCCATTGCTACACCAACCAAGGTGTCTGGGACATGCGTGGGAAACAGTTCTACAATGGGA
 TTGAGATCAAAGTCTGGGCCATCGCTGCTTCGCACCCCAAAAACAATGTCGAGAAGAGGTGCTCAAGAA
 CTTACGGACAGCTTCGGAAGATCTCAAGGATGCAGGGATGCCATCCAGGGTCCAGCCATGTTTCTGC
 AAATACGCACAGGGGGCGGACAGCGTGGAGCCCATGTTCCGGCATCTCAAGAATACCTACTCAGGACTGC
 AGCTCATTATTGTCATCTGCCCGGAAGACGCCGGTGTATGCTGAAGTGAAGCGTGTGGAGATACGCT
 CTTGGGAATGGCAGACACAGTGTGTGCAGGTGAAGAATGTGGTCAAGACCTCACCTCAGACTCTGTCCAAC
 CTCTGCCCTCAAGATCAATGTCAAACCTCGGTGGCATCAACAACATCCTTGTCCCACACCAGCGCTCTGCTG
 TTTTCAAACAGCCAGTGATTTTTCTGGGAGCAGACGTTACACACCCCGGCTGGGGACGGGAAGAACC
 ATCTATCACAGCAGTGGTAGGCAGTATGGATGCACACCCAGCCGATACTGTGCCACTGTGCGTGTACAG
 CGTCCACGGCAGGAGATCATTGAGGACTTGTCTATATGGTGGGGAGCTGCTCATCCAGTTCTACAAGT
 CCACCCGATTCAAGCCCACCCGAATCATCTTCTACCGAGATGGGGTCCCTGAAGGCCAGCTGCCTCAGAT
 CCTTCACTATGAGCTGCTTGCCATTGAGATGCCTGCATCAAACCTGAAAGAGACTACCAGCCTGGGATC
 ACGTACATCGTGGTACAGAAGCGACATCACACCCGCTCTTTGTGCTGACAAGAATGAGCGGATTGGGA
 AGAGTGGTAACATCCCAGCTGGGACCACTGTGGACACCAACATCACTCACCCGTTTGGATTTGACTTCTA
 CCTGTGCAGCCATGCAGGCATCCAGGGCACCAGCCGACCATCCATTATTATGTCCTTTGGGATGACAAC
 CGTTTTACAGCAGATGAGCTCCAGATCTTGACATACCAGCTGTGCCACACTTATGTACGATGCACAGTT
 CTGTCTCTATCCAGCACCTGCCTACTATGCCCGCTGGTGGCTTTCCGGGCCGATACCACCTGGTGGGA
 CAAGGAGCATGACAGTGGAGAGGGGAGCCACATATCTGGGCAGAGCAATGGGCGAGACCCCAAGGCCCTG
 GCCAAAGCCGTGCAGGTTACCAGGATACTCTACGCACCATGTACTTCGCT

ACCGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR217268 representing NM_001191765
Red=Cloning site Green=Tags(s)

MEAGPSGAAAGAYLPPLQQVFQAPRRPGIGTVGKPIKLLANYFEVDIPKIDVYHYEVDIKPDKCPRRVNR
EVVEYMQHFQIFGDRKPVYDGKKNIYVTALPIGNERVDFEVTIPGEGKDRIFKVSIKWLAIVSWRM
LHEALVSGQIPVPLESVQALDVAMRHLASMRYPVGRSFFSPPEGYYHPLGGGREVWFGFHQSVRPAMWK
MMLNIDVSATAFYKAQPVIEFMCEVLDIRNIDEQPKPLTDSQRVRFKEIKGLKVEVTHCGQMKRKYRVC
NVTRRPASHQTFPLQLESGQTVECTVAQYFKQYNLQLKYPHLPCLQVQEQKHTYLPLEVCNIVAGQRC
IKKLTDNQSTMIKATARSAPDRQEEISRLMKNASYNLDPYIQEFGIKVKDDMTEVTGRVLPAPILQYGG
RNRAIATPNQGVWDMRGKQFYNGIEIKVWAIACFAPQKQCREEV LKNFTDQLRKISKDAGMPIQGQPCFC
KYAQGADSVEPMFRHLKNTYSGLQLIIVILPGKTPVYAEVKRVGDLLGMATQCVQKNVVKTSPTLSN
LCLKINVKLGGINNILVPHQRSVAFQQPVI FLGADVTHPPAGDGKKPSITAVVGSMDAHPSTRYCATVRVQ
RPRQEIIEDLSYVRELLIQFYKSTRFKPTRIIFYRDGVPEGQLPQILHYELLAIRDACIKLERDYQPGI
TYIVVQKRHHTRLFCADKNERIGKSGNIPAGTTVDNITHPFEDFYLC SHAGIQGTSRPSHYVLDWDDN
RFTADELQILTYQLCHTYVRCRTRSVSIPAPAYYARLVAFRARYHLVDKEHDSGEGSHISGQSNRDPQAL
AKAVQVHQDTRLRMYFA

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

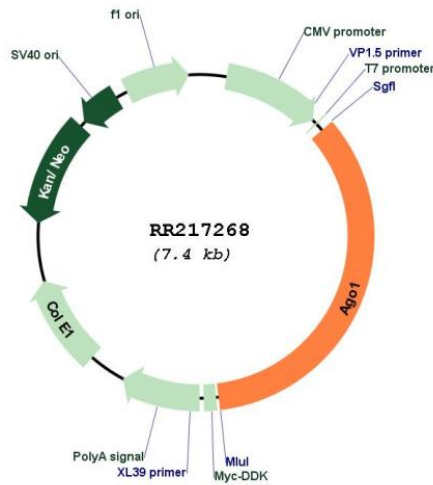
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:	NM_001191765
ORF Size:	2571 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:	<ol style="list-style-type: none">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_001191765.2 , NP_001178694.1
RefSeq Size:	7378 bp
RefSeq ORF:	2574 bp
Locus ID:	313594
Cytogenetics:	5q36
MW:	97.2 kDa
Gene Summary:	This gene encodes a member of the argonaute family of proteins, which associate with small RNAs and have important roles in RNA interference (RNAi) and RNA silencing. This protein binds to microRNAs (miRNAs) or small interfering RNAs (siRNAs) and represses translation of mRNAs that are complementary to them. It is also involved in transcriptional gene silencing (TGS) of promoter regions that are complementary to bound short antogene RNAs (agRNAs), as well as in the degradation of miRNA-bound mRNA targets. A recent study showed this gene to be an authentic stop codon readthrough target, and that its mRNA could give rise to a C-terminally extended isoform by use of an alternative in-frame translation termination codon. [provided by RefSeq, Nov 2015]