

## Product datasheet for **RC209163**

### AGO1 (NM\_012199) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	AGO1 (NM_012199) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AGO1
Synonyms:	EIF2C; EIF2C1; GERP95; hAgo1; Q99
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide  
Sequence:**

>RC209163 representing NM\_012199  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAAGCGGGACCCTCGGGAGCAGCTGCGGGCGCTTACCTGCCCCCTGCAGCAGGTGTTCCAGGCAC  
 CTCGCCGGCTGGCATTGGCACTGTGGGAAACCAATCAAGCTCCTGGCCAATTACTTTGAGGTGGACAT  
 CCCTAAGATCGACGTGTACCACTACGAGGTGGACATCAAGCCGGATAAGTGTCCCCGTAGAGTCAACCGG  
 GAAGTGGTGAATACATGGTCCAGCATTCAAGCCTCAGATCTTTGGTATCGCAAGCCTGTGTATGATG  
 GAAAGAAGAACATTTACTGTACAGCACTGCCATTGGCAACGAACGGGTGACTTTGAGGTGACAAT  
 CCCTGGGAAGGGAAGGATCGAATCTTTAAGGTCTCCATCAAGTGGTAGCCATTGTGAGCTGGCGAATG  
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 CAAAGTGAAGGATGACATGACGGAGGTGACAGGGCAGTGTGCCGGCGCCCATCTTGAGTACGGCGGC  
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**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC209163 representing NM\_012199  
Red=Cloning site Green=Tags(s)

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MEAGPSGAAAGAYLPPLQQVFQAPRRPGIGTVGKPIKLLANYFEVDIPKIDVYHYEVDIKPDKCPRRVNR
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AKAVQVHQDTRLRTMYFA
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2528\\_g07.zip](https://cdn.origene.com/chromatograms/mg2528_g07.zip)

**Restriction Sites:** SgfI-MluI

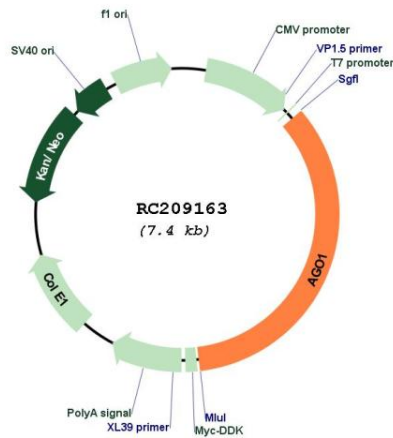
**Cloning Scheme:**

Cloning sites used for ORF Shuttling:

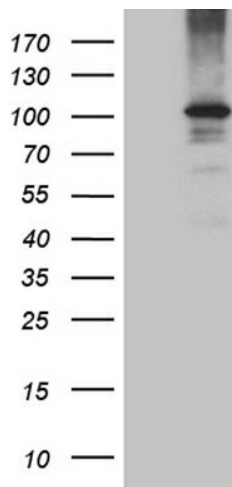


\* The last codon before the Stop codon of the ORF

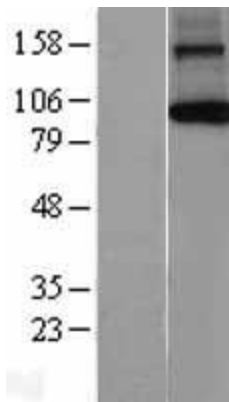
<b>ACCN:</b>	NM_012199
<b>ORF Size:</b>	2571 bp
<b>OTI Disclaimer:</b>	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), 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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_012199.5</a>
<b>RefSeq Size:</b>	7478 bp
<b>RefSeq ORF:</b>	2574 bp
<b>Locus ID:</b>	26523
<b>UniProt ID:</b>	<a href="#">Q9UL18</a>
<b>Cytogenetics:</b>	1p34.3
<b>Protein Families:</b>	Druggable Genome
<b>MW:</b>	97 kDa
<b>Gene Summary:</b>	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 antiseRNA RNAs (agRNAs), as well as in the degradation of miRNA-bound mRNA targets. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. A recent study showed this gene to be an authentic stop codon readthrough target, and that its mRNA could give rise to an additional C-terminally extended isoform by use of an alternative in-frame translation termination codon. [provided by RefSeq, Nov 2015]

**Product images:**


Circular map for RC209163



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY EIF2C1 (Cat# RC209163, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-EIF2C1 (Cat# [TA811173])(1:500). Positive lysates [LY402163] (100ug) and [LC402163] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402163]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209163 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).