

Product datasheet for **MR230224**

Agbl4 (NM_001284190) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Agbl4 (NM_001284190) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Agbl4
Synonyms:	4930578N11Rik; 4931433A01Rik
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR230224 representing NM_001284190
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGGAGCGGAGCCAGACAGCGCCAGAGGCAGGCAATGATACAGGAAATGAGGATGCCATTGGAGGGA
 ATGTGAACAAATACATAGTGCTTCCAAATGGATACTCTGGACAGCCCAAGAAAGGACATCTTACCTTTGA
 TGCTTGCTTTGAAAGTGTAACCTCGGCCGGGTTGAGCAAGTCTCTGATTTTGTAGTATGATCTGTTTATT
 AGGCCGGACACCTGTAATCCACGCTTCCGAGTCTGGTTCAACTTTACTGTTGAAAATGTGAAAGAATTGC
 AGAGGGTAATTTTCAACATTGTTAACTTCAGTAAAACCAAGAGTCTTACCGAGATGGGATGGCACCAAT
 GGTGAAATCTACCAGCAGACCAAATGGCAAAGACTACCACCAAAAAACGTTTATTACTATCGCTGCCCA
 GACCACAGGAAGAACTATGTGATGTCCTTTGCATTCTGTTTTGACCGAGAAGATGATATCTACCAGTTT
 CTTACTGCTACCCTTATACATATACTCGCTTCCAGCATTACCTCGACAGCTTACAAAAGAAAAACATGGA
 TTTTTCTTCCGGGAACAGCTTGGACAGAGTGTGCAACAGCGGCAGCTTGACCTCCTGACGATAACCAGC
 CCGGAGAATCTCCGTGAAGGGTCAGAAAAGAAGGTGATATTCATCACAGGGCGAGTCCACCCAGGGGAAA
 CGCCATCTTCATTTGTGTGCAAGGAATCATCGACTTCCTTGAAGTCAGCATCCAATTGCCCGTGTCTT
 ACGAGAACATTTAGTCTTCAAGATTGCTCCAATGCTCAACCCTGATGGAGTTTACCTGGGCAACTACAGG
 TGTTCCCTGATGGGGTTTGACCTGAATCGTCACTGGCTGGATCCCTCTCCATGGGCCCATCCACCCCTGC
 ATGGAGTGAAACAGCTTATTATCAAGATGTACAATGACCCAAAAACAAGCCTGGAGTTCTATATTGACAT
 CCACGCTCACTCCACCATGATGAATGGCTTCATGTACGGCAATATCTTTGAGGATGAGGAACGGTTCCAA
 AGGCAGTCCATTTTCCAAAACCTCTTGGCAGAATGCCGAGGACTTCTCCTATACTAGCACATCCTTCA
 ACAGGGATGCTGTGAAAGCAGGAACCTGGCCGGCGCTTCTGGGGGGCTTCTGGACCCTCATCATACTG
 CTATAACCCTAGAGGTTTCTTCTACAGCTACATCATTGGGGTACTACAGCTGCAGTGCCTTACACTGAA
 GAAGCCTATATGAACTGGGACGGAACGTGCAAGAACATTTCTAGATTATTACCGGCTGAACTCCCTGG
 TTGAGAAGATAGCAGTCCCATGCCAAGACTTCGGAAAGAAAAAGCCCTCCTTGAAGCACCCACCCCC
 AAGGGGCTCAACCAGCAACGTCTCCATTGGCAAAGGGGACAAGAAGAACTCACTGAACCACAAAGACCCA
 TCAACCCCTTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR230224 representing NM_001284190
 Red=Cloning site Green=Tags(s)

MAERSQTAPEAGNDTGNEDAIGGNVVKYIVLPNGYSGQPKKGHLTFDACEFESGNLGRVEQVSDFEYDLFI
 RPDTCNPRFRVWFNFTVENVKELQRVIFNIVNFSKTKSLYRDMAPMVKSTSRPKWQRLPPKNVYYYRCP
 DHRKNYVMSFAFCFDREDDIYQFAYCYPYTYTRFQHYLDSLQKKNMDYFFREQLGQSVQQRLDLLTITS
 PENLREGSEKKVIFITGRVHPGETPSSFVCQGIIDFLVSQHPIARVLRHLVFKIAPMLNPDGVYLGNYR
 CSLMGFDLNRHWDLPSPWAHPTLHGKQLIIKMYNDPKTSLEFYIDIHAHSTMMNGFMYGNIFEDEERFQ
 RQSI FPKLLCQNAEDFSYTSFSNRDAVKAGTGRRFLGGLLDHSSYCYTLEVSFYIIGGTTAAVPYTE
 EAYMKLGRNVARTFLDYRLNSLVEKIAVPMPLRKEKAPPCKHPPPRGSTSNVSIKGDKKNSLNHKDP
 STPF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

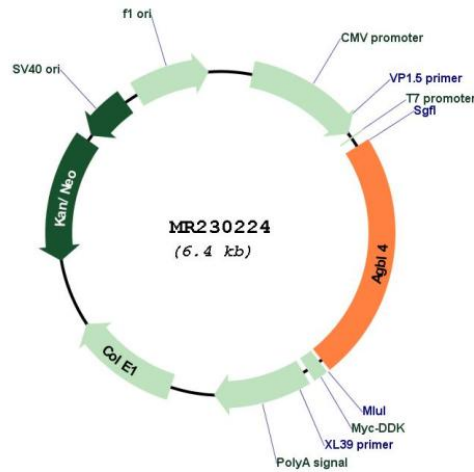
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001284190

ORF Size: 1482 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_001284190.2](#)

RefSeq Size: 1659 bp

RefSeq ORF: 1485 bp

Locus ID: 78933

Cytogenetics: 4 C7-D1

MW: 57.5 kDa

Gene Summary: Metalloprotease that mediates deglutamylation of target proteins (PubMed:17244818, PubMed:21074048, PubMed:25103237, PubMed:26829768). Catalyzes the deglutamylation of polyglutamate side chains generated by post-translational polyglutamylation in proteins such as tubulins (PubMed:17244818). Also removes polyglutamates from the carboxy-terminus of target proteins such as MYLK (PubMed:21074048). Mediates deglutamylation of CGAS, regulating the antiviral activity of CGAS (PubMed:26829768). Acts as a long-chain deglutamylase and specifically shortens long polyglutamate chains, while it is not able to remove the branching point glutamate, a process catalyzed by AGL5/CCP5 (PubMed:25103237).[UniProtKB/Swiss-Prot Function]