

## Product datasheet for **RC217452**

### AGBL5 (NM\_021831) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	AGBL5 (NM_021831) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AGBL5
Synonyms:	CCP5; RP75
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC217452 representing NM\_021831  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGCTGCGCTGTGGGGATTGCTGTTCAGTTCCTCGCTTTGATTCAGGGAATCTAGCCCACGTGGAGA  
 AGGTGGAATCTTTGTCCAGTGATGGGGAAGGGGTAGGAGGTGGGGCGTCAGCCCTGACCAGTGCCATTGC  
 CTCTTCCCTGACTATGAATCAACGTGTGGACCCGACCAGACTGTGCTGAAACGGAATTTGAGAATGGG  
 AACAGGTCATGGTTCTACTTCAGCGTCCGGGGAGGAATGCCAGGAAAACATCAAGATCAACATTATGA  
 ACATGAACAAGCAGAGCAAGCTGTATTCCAGGGCATGGCCCCCTTTGTGCGCACACTGCCACCCGGCC  
 ACGCTGGGAACGCATTGAGACCCGGCCACCTTTGAGATGACAGAGACGCAGTTTGTGTTATCCTTTGTT  
 CATCGTTTCGTGGAGGGCCGTGGGGCCACCACCTTCTCGCCTTCTGCTACCCCTTCTCCTACAGTGACT  
 GCCAGAACTGCTAAACCAGCTAGACCAGCGCTTCCGGAGAACCACCCTACCCATAGCAGCCCCCTGGA  
 TACCATCTATTACCATCGGGAGCTCCTTTGCTATTCTCTGGATGGACTTCGTGTAGATCTGCTGACGATC  
 ACTTCTGCCATGGGCTTCGAGAAGATCGAGAGCCCCGTCTAGAGCAGCTATTTCTGATACCAGCACCC  
 CTCGACCATTCCGTTTCGAGGCAAGAGGATATCTTCTTAAGCAGTAGAGTACACCCAGGGGAGACTCC  
 ATCTAGCTTTGTCTTCAATGGCTTTCTGGACTTCATCCTCCGACCTGATGATCCCCGGGCCAAACCCCTC  
 CGTCGCCTCTTCGTCTTAAAGCTGATCCCATGTTGAACCCCGATGGTGTGGTCCGGGGACACTACCGCA  
 CAGACTCACGTGGAGTGAATCTGAACCGTCAGTACCTGAAGCCTGATGCCGTCTGCACCCGGCCATCTA  
 TGGGGCCAAAGCTGTGCTTCTCTACCACCATGTGCACTCTCGTCTGAACCTCCAGAGTTCCTCTGAGCAC  
 CAGCCCAGTTCCTGTCTCCCTCCTGATGCTCCTGTTTCTGACCTGGAGAAAAGCCAACAATCTCCAAAATG  
 AAGCTCAGTGTGGCACTCAGCTGACAGGCATAACGCTGAAGCCTGGAAAACAACAGCAGCAGCAGACA  
 GAAGCTCAACAGTGTGGATTATGCCACAACAGTCTGCGGGGCTTGAAGAGTCAAGCCCCGATACCATC  
 CCCCCAAAGAGAGTGGCGTTGCTTACTATGTGGACCTGCATGGACATGCTTCCAAAAGGGGCTGCTTCA  
 TGTACGAAAACAGCTTTAGTGATGAGAGACCCAGGTGAAAACATGCTATATCCAAAGCTCATCTCCTT  
 GAATTCAGCCCACTTCGACTTCAGGGCTGCAATTTCTCAGAGAAGAATATGTATGCCGAGACCGTAGA  
 GATGGCCAGTCTAAAGAGGGAAGCGCCGTGTTGCAATCTACAAAGCCTCAGGGATAATCCACAGCTACA  
 CACTTGAATGCAACTACAACACTGGACGCTCAGTAAACAGCATCCCTGCTGCCTGCCATGACAATGGGCG  
 TGCCAGCCCCCTCCCCGCGGCTTCCCTCCAGATACACTGTGGAATTTTGTAGCAGGTGGGACGA  
 GCTATGGCCATTGCAGCCCTGGACATGGCGGAATGTAATCCGTGGCCCCGAATTGTACTGTGAGAGCACA  
 GCAGCCTTACTAATCTACGGGCTGGATGCTGAAACATGTACGCAACAGCCGAGGCTAAGCAGCACTCT  
 GAATGTGGGTGTCAACAAGAAGAGGGGCTTCCAACTCCACCCAAAAGTCACAATGGGTTGCCTGTCTCC  
 TGCTCCGAAAACACCTTGAGTCGGGCACGAAGTTTTCAGACCCGGCACAAGTCCCGGTGGTAGCAGAGCA  
 GCCAACAAAATCTCCACAGATGAAGAATCCCCCAGCTTTCTTTTTCATGGCAGTCGGCCTGCAGGGCT  
 GCCAGGCTGGGCTCTAGTACCCAAAAGGTCAACCACCGGGTGTGGGCCCGCTCAGAGAGCCCCGAAGC  
 CAGGACAGGAGACGGCAGCAGCAGCCCCGAACCATCGTCTGCAGGCAGCCTCGCTCCATCCCCAGCTC  
 TACTAGTTCTGGCCAGCCTCCTCACACAAGCTGGGCTCCTGTCTACTGCCTGATTCAATCAACATACC  
 AGGGAGCAGTTGCTCACTTTGCTCTGTGGAGACAAACCAGAGGCTGTCATGGTAATCGGGAAGGTTCTG  
 CTAGGGACTGGAGCTCGGATGCCCTGCATCAAGACTCGATTGCAGGCTAGGCCAGGTTGGCCGGGGCT  
 CACCGCCGACTCGCAGAGGGATGAAAGGCTTTCAGGCCACATCCCCTACCCCCGGACCAGGGAGAG  
 CAGTGAGCTGGAGCTGGGATCCTGCTCTGCTACACCAGGGCTGCCTCAGGCCAGGCCCCACGGCCCCGC  
 TCTGCCCTGCCTTTTCTCCTATATCCTGTAGTCTATCTGACTCCCCATCCTGGAATTGTTACAGCAGGG  
 GTCCTTGGGCCAACCTGAGGTTGTTTGTCCCTAAATCTCCCCACTGACTGTTTCTCCCCGGGTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAAACATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC217452 representing NM\_021831  
 Red=Cloning site Green=Tags(s)

MELRCGGLLFSSRFDSGNLAHVEKVESLSSDGEVGGGASALTSGIASSPDYEFNVWTRPDCAETEFENG  
 NRSWFYFSVRGGMPGKLIKINIMNMNKQSKLYSQMAPFVRTLPTRPRWERIRDRPTFEMTETQVLSFV  
 HRFVEGRGATTFFAFCYPFSYSDCQELLNQLDQRFENHPTHSSPLDTIYYHRELLCYSLDGLRVDLLTI  
 TSCHGLREDREPRLEQLFPDTSTPRPFRFAGKRIFFLSSRVHPGETPSSFFVNGFLDFILRPDDPRAQTL  
 RRLFVFKLIPMLNPDGVVRGHRDTSRGNLNRQYLKPDVLPHPAIYGAVALLYHHVHSRLNSQSSSEH  
 QPSSCLPPDAPVSDLEKANNLQNEAQCCHSADRHNAAEAWKQTEPAEQKLSNVWIMPQQSAGLEESAPDTI  
 PPKESGVAYYVDLHGASKRGCIFYGNSFSDESTQVENMLYPKLI SLNSAHDFDQGCFSEKNMYARDRR  
 DGQSKEGSGRVAIYKASGIIHSYTLNNTGRSVNSIPAACHDNGRASPPPPAFPSRYVELFEQVGR  
 AMAIAALDMAECNPWPRIVLSEHSSLTNLRAWMLKHVRNSRGLSSTLVNGVNNKRLRTPPKSHNGLPVS  
 CSENTLSRARSFSTGTSAGGSSSQNSPQMKNSPFPFHGSRPAGLPGLGSSTQKVTHRVLGPVREPRS  
 QDRRRQQQLNHRPAGSLAPSPAPTSSGPASSHKLGSCLLPDSFNIPGSSCSLLSSGDKPEAVMVIKGL  
 LGTGARMPCIKTRLQARPRLRGSPPTRRGMKSSGPTSPTRTRESSELELGSCSATPGLPQARPPRRP  
 SAPAFSPISCSLSDSPSWNCYSRGLGQPEVCFVPKSPPLTVSPRV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8015\\_f06.zip](https://cdn.origene.com/chromatograms/mk8015_f06.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

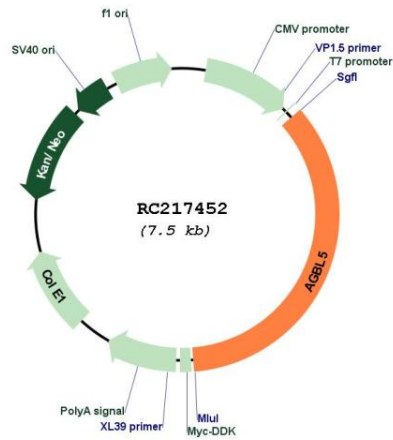
Cloning sites used for ORF Shuttling:



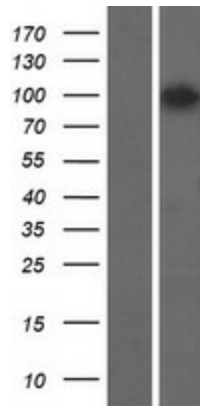
\* The last codon before the Stop codon of the ORF

<b>ACCN:</b>	NM_021831
<b>ORF Size:</b>	2658 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_021831.6</a>
<b>RefSeq Size:</b>	3254 bp
<b>RefSeq ORF:</b>	2661 bp
<b>Locus ID:</b>	60509
<b>UniProt ID:</b>	<a href="#">Q8NDL9</a>
<b>Cytogenetics:</b>	2p23.3
<b>Domains:</b>	Zn_carbOpept
<b>MW:</b>	97.4 kDa
<b>Gene Summary:</b>	This gene encodes a metalloprotease involved in protein deglutamylation and a member of the peptidase M14 family of proteins. The encoded protein has been described as a "dual-functional" deglutamylase that can remove glutamate residues from both carboxyl termini and side chains of protein substrates. This deglutamylase activity may be important in antiviral immunity. Mutations in this gene are associated with retinitis pigmentosa. [provided by RefSeq, Jul 2016]

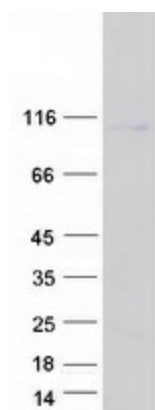
Product images:



Circular map for RC217452



Western blot validation of overexpression lysate (Cat# [LY411897]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217452 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified AGBL5 protein (Cat# [TP317452]). The protein was produced from HEK293T cells transfected with AGBL5 cDNA clone (Cat# RC217452) using MegaTran 2.0 (Cat# [TT210002]).