

Product datasheet for **RG215785**

AGL (NM_000646) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AGL (NM_000646) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	AGL
Synonyms:	GDE
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG215785 representing NM_000646 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCCCAATTCTGAGCATTAAATTTATTGGGTATGAGCTACAGTCCGATTAGGCCCAACTTTAC
AGGGAAAAGCAGTTACCGTGTATACAAATTACCCATTTCTGGAGAAACATTTAATAGAGAAAAATCCG
TTCTCTGGATTGGGAAAATCCAACAGAAAGAGAAGATGATTCTGATAAACTGTAACCTAATCTGCAA
CAATCTGGTTCATTTAGTATTATTTCTTCAAGGAAATGAGAAAAGTGGTGGAGTTACATAGTTGTGG
ACCCCATTTTACGTGTTGGTGTGATAATCATGTGCTACCCTTGGACTGTGTTACTCTTCAGACATTTTT
AGCTAAGTGTGGGACCTTTGATGAATGGGAAAGCAGACTTAGGGTTCAAAAGAATCAGGCTACAAC
ATGATTCAATTTACCCATTGCAGACTCTTGGACTATCTAGGTCATGCTACTCCCTTGCCATCAGTTAG
AATTAATCCTGACTTTTCAAGACCTAATAGAAAGTATACCTGGAATGATGTTGGACAGCTAGTGGAAAA
ATTAAGAAAGGAATGGAATGTTATTTGTATTACTGATGTTGTCTACAATCATACTGCTGCTAATAGTAAA
TGGATCCAGGAACATCCAGAATGTGCCTATAATCTTGTGAATTCACACTTAAACCTGCCTGGGTCT
TAGACAGAGCACTTTGGCGTTTCTCCTGTGATGTTGCAGAAGGAAAACAAAAGAAAAGGGAATACCTGC
TTTGATTGAAAATGATCACCATATGAATCCATCCGAAAAATAATTTGGGAGGATATTTTTCCAAAGCTT
AAACTCTGGGAATTTTTCCAAGTAGATGTCAACAAAGCGGTTGAGCAATTTAGAAGACTTCTTACACAAG
AAAATAGGCGAGTAACCAAGTCTGATCCAACCAACACCTTACGATTATTCAAGATCCTGAATACAGACG
GTTTGGCTGTACTGTAGATATGAACATTGCACTAACGACTTTTATACCACATGACAAGGGGCCAGCAGCA
ATTGAAGAATGCTGTAATTGGTTTCATAAAAGAATGGAGGAATTAATTCAGAGAAGCATCGACTCATT
ACTATCATCAGGAACAGGCAGTTAATTGCCTTTTGGGAAATGTGTTTTATGAACGACTGGCTGGCCATG
TCCAAAAGTAGGACCTGTCACTAGAAAGCATCCTTTAGTTACCAGGTATTTTACTTTCCCATTTGAAGAG
ATAGACTTCTCCATGGAAGAATCTATGATTCTGCAAAATAAAGCTTGTGTTTCTGATGGCACACAATG
GATGGGTAAATGGGAGATGATCCTCTTCGAAACTTTGCTGAACCGGTTTCCAGAGTTTACCTAAGGAGAGA
ACTTATTTGCTGGGAGACAGTGTAAATACGCTATGGGAATAAACCAGAGGACTGTCCTTATCTCTGG



[View online »](#)

GCACACATGAAAAATACACTGAAATAACTGCAACTTATTTCCAGGGAGTACGTCTTGATAACTGCCACT
 CAACACCTCTTCACGTAGCTGAGTACATGTTGGATGCTGCTAGGAATTTGCAACCAATTTATATGTAGT
 AGCTGAACTGTTACAGGAAGTGAAGATCTGGACAATGTCTTTGTTACTAGACTGGGCATTAGTTCCTTA
 ATAAGAGAGGCAATGAGTGCATATAATAGTCATGAAGAGGGCAGATTAGTTTACCGATATGGAGGAGAAC
 CTGTTGGATCCTTTGTTACGCCCTGTTTGGGCCCTTAAATGCCAGCTATTGCACATGCCCTGTTTATGGA
 TATTACGCATGATAATGAGTGCCTATTGTGCATAGATCAGCGTATGATGCTCTTCCAAGTACTACAATT
 GTTTCTATGGCATGTTGTCTAGTGAAGTACAAGAGGCTATGATGAATTAGTGCCTCATCAGATTTCCAG
 TGGTTTCTGAAGAACGGTTTTACACTAAGTGAATCCTGAAGCATTGCCTTCAAACACAGGTGAAGTTAA
 TTTCAAAGCGGCATTATTGCAGCCAGGTGTGCTATCAGTAAACTTCATCAGGAGCTTGGAGCCAAGGGT
 TTTATTACAGTGTATGTGGATCAAGTTGATGAAGACATAGTGGCAGTAACAAGACACTCACCTAGCATCC
 ATCAGTCTGTTGTGGCTGTATCTAGAAGTCTTTCAGGAATCCCAAGACTTCATTTTACAGCAAGGAAGT
 GCCTCAAATGTGCATCCCTGGCAAAATGAAGAAGTAGTCTTGAAGCTAGAAGTATTGAGAGAAACACG
 AAACCTTATAGGAAGGATGAGAATCAATCAATGGAACACCAGATATCACAGTAGAAATTAGAGAACATA
 TTCAGCTTAATGAAAGTAAAATTGTTAAACAAGCTGGAGTTGCCACAAAAGGGCCCAATGAATATATTCA
 AGAAATAGAATTTGAAAACCTGTCTCCAGGAAGTGTATTATATTCAGAGTTAGTCTTGATCCACATGCA
 CAAGTCGCTGTTGGAATCTTCGAAATCATCTGACACAATTCAGTCTCACTTTAAATCTGGCAGCCTAG
 CTGTTGACAATGCAGATCCTATATTAATAATCCCTTTTGCTTCTCTTGCCTCCAGATTAACCTTTGGCTGA
 GCTAAATCAGATCCTTTACCGATGTGAATCAGAAGAAAAGGAAGATGGTGGAGGGTCTATGACATACCA
 AACTGGTCAGCCCTTAAATATGCAGGTCTTCAAGGTTTAAATGTCTGTATTGGCAGAAATAAGACCAAGA
 ATGACTTGGGGCATCCTTTTGTAAATTTGAGATCTGGAGATTGGATGATTGACTATGTCAGTAAACCG
 GCTTATTTACAGTACAGGAATTTGCTGAAGTTGGTAAATGGTGCAGGCTATGTTCTTCTACCTGAAG
 CAGATCCCACGTTACCTTATCCCATGTTACTTTGATGCTATATTAATTTGGTGCATATACCACTCTTCTGG
 ATACAGCATGGAAGCAGATGTCAAGCTTTGTTGAGAATGGTTCAACCTTTGTGAAACACCTTTCATTGGG
 TTCAGTTCAACTGTGTGGAGTAGGAAAATTCCTTCCCTGCCAATTCCTTACCTGCCCTAATGGATGTA
 CCTTATAGGTTAAATGAGATCACAAAAGAAAAGGCAATGTTGTGTTTCTCTAGCTGCAGGCTTACCTC
 ATTTTTCTTCTGTTATTTCCGCTGCTGGGGAAGGGATACTTTTATTGCACTTAGAGGTATACTGCTGAT
 TACTGGACGCTATGTAGAAGCCAGGAATATTATTTAGCATTGCGGGTACCCTGAGGCATGGTCTCATT
 CCTAATCTACTGGGTGAAGGAATTTATGCCAGATACAATTGTCGGGATGCTGTGTGGTGGTGGCTGCAGT
 GTATCCAGGATTACTGAAAATGGTCCAAATGGTCTAGACATTCTCAAGTGCCCAAGTTCCAGAATGTA
 TCCTACAGATGATTCTGCTCCTTTCCTGCTGGCACACTGGATCAGCCATTGTTTGAAGTCATACAGGAA
 GCAATGCAAAAACACATGCAGGGCATAACAGTTCGAGAAAAGGAATGCTGGTCCCCAGATAGATCGAAACA
 TGAAGGACGAAGTTTTAATATAACTGCAGGAGTTGATGAAGAAACAGGATTTGTTTATGGAGGAAATCG
 TTTCAATTGTGGCACATGGATGGATAAAATGGGAGAAAAGTGCAGAGCTAGAAAACAGAGGAATCCCAGCC
 ACACCAAGAGATGGGTCTGCTGTGGAAATGTGGGCCTGAGTAAATCTGCTGTTCTGCTGGTGTCTGGAAT
 TATCCAAAAAATATTTTCCCTTATCATGAAGTCACAGTAAAAAGACATGGAAAGGCTATAAAGGTCTC
 ATATGATGAGTGGAAACAGAAAAATACAAGACAACCTTTGAAAAGCTATTTTCATGTTTCCGAAGACCTTCA
 GATTTAAATGAAAAGCATCCAAATCTGGTTCACAAACGTGGCATATACAAAGATAGTTATGGAGCTTCAA
 GTCCTTGGTGTGACTATCAGCTCAGGCCATAATTTACCATAGCAATGGTGTGGCCCTGAGCTCTTTAC
 TACAGAAAAAGCATGAAAAGCTTTGGAGATTGCAGAAAAAAATGCTTGGTCCCCTGGCATGAAAAC
 TTAGATCCAGATGATATGGTTTACTGTGAATTTATGACAATGCATTAGACAATGACAACACTACAATCTTG
 CTAAGGTTTTCAATTATACCAAGGACCTGAGTGGCTGTGGCCTATTGGGTTTTTCTTCTGCAAAATT
 ATATTTTTCCAGATTGATGGGCCGGAGACTACTGCAAAGACTATAGTTTTGGTTAAAAATGTTCTTTCC
 CGACATTATGTTTCATCTTGAGAGATCCCCTTGGAAAGGACTTCCAGAAGTACCAATGAGAATGCCAGT
 ACTGTCCTTTCAGCTGTGAAACACAAGCCTGGTCAATTGCTACTATTCTTGAGACACTTTATGATTTA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG215785 representing NM_000646
 Red=Cloning site Green=Tags(s)

```

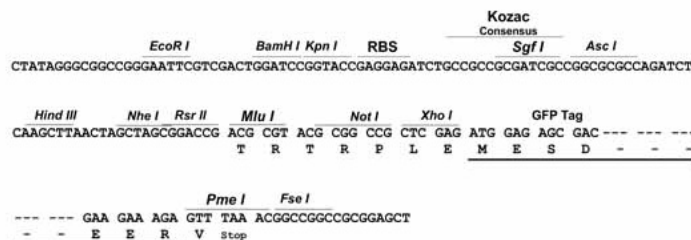
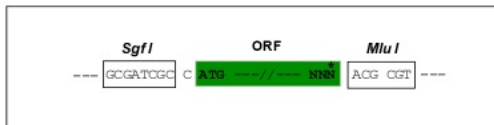
MAPILSINLFIGYELQFRLGPTLQGKAVTVYTNYPFPGETFNREKFRSLDWENPTEREDDSKYCKLNLQ
QSGSFQYYFLQNEKSGGGYIVVDPILRVGADNHVLPDCVTLQTLAKCLGPFDEWESRLRVAKESGYN
MIHFTPLQTLGLSRSCYSLANQLELNPDFSRPNRKYTWNDVQQLVEKLKKEWNVICITDVVYNHTAANSK
WIQEHPCEAYNLVNSPHLKPAWVLDRALWRFSCDVAEGKYKEKGIPALIENDHHMNSIRKIIWEDIFPKL
KLWEFFQVDVNKAVEQFRRLLTQENRRVTKSDPNQHLTI IQDPEYRRFGCTVDMNIALTTFIPHDKGPA
IEECCNWFHKRMEELNSEKHRLINYHQEQAVNCLLGNVYERLAGHGPKLGPVTRKHPLVTRYFTFPFEE
IDFSMEESMIHLPNKACFLMAHNGWVMGDDPLRNFAEPGSEVYLRRELICWGDSVKLRYGNKPEDCPYLW
AHMKKYTEITATYFQGVRLDNCHSTPLHVAEYMLDAARNLQPNLYVVAELFTGSELDNVFVTRLGISSL
IREAMSAYNSHEEGRLVYRYGGEPVGSFVQPCRLMPTAHALFMDITHDNECPIVHRSAYDALPSTTI
VSMACCASGSTRGYDELVPHQISVVSEERFYTKWNPEALPSNTGEVNFQSGIIAARCAISKLHQELGAKG
FIQVYVDQVDEDIVAVTRHSPSIHQSVVAVSRTAFRNPKTSFYSKEVPQMCIPGKIEEVLEARTIERNT
KPYRKDENSINGTPDITVEIREHIQLNESKIVKQAGVATKGPNEYIQEIEFENLSPGSVIFRVSLDPHA
QVAVGILRNHLTQFSPHFKSGSLAVDNADPILKIPFASLASRLTLAELNQILYRCESEEKEDGGGCYDIP
NWSALKYAGLQGLMSVLAEIRPKNDLGHPCNNLRSGDWMIDYVSNRLISRSGTIAEVGKWLQAMFFYLK
QIPRYLIPCYFDAILIGAYTTLLDTAWKQMSFVQNGSTFVKHLSLGSVQLCGVGKFPSPILSPALMDV
PYRLNEITKEKEQCCVSLAAGLPHFSSGIFRCWGRDTFIALRGILLITGRYVEARNIILAFAGTLRHGLI
PNLLGEGIYARYNCRDAVWWLQCIQDYCKMVPNGLDILKCPVSRMYPTDSDAPLPAGTLDQPLFEVIQE
AMQKHMQGIQFRERNAGPQIDRNMKDEGFNITAGVDEETGFVYGGNRFNCGTWMDKMGESDRARNRGI
TPRDGSAVEIVGLSKSAVRWLEL SKKNIFPYHEVTVKRHGKAIKVSYDEWNRKIQDNFEKLFHVSEDP
DLNEKHPNLVHKRGIYKDSYGASSPWCDYQLRPNFTIAMVVAPELFTTEKAWKALEIAEKLLGPLGMKT
LDPDDMYVYCGIYDNALDNDNYNLAKGFNYHQPEWLWPIGYFLRAKLYF SRLMGPETTAKTIVLVKNVLS
RHYVHLERSPWKGLPELTNENAQYPCFSCETAQWSIATILETYDL
  
```

TRTRPLE - GFP Tag - V

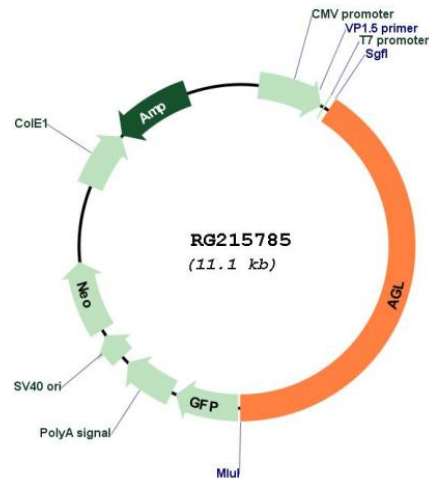
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_000646

ORF Size: 4548 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_000646.2 , NP_000637.2
RefSeq Size:	7182 bp
RefSeq ORF:	4551 bp
Locus ID:	178
UniProt ID:	P35573
Cytogenetics:	1p21.2
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Starch and sucrose metabolism
Gene Summary:	<p>This gene encodes the glycogen debrancher enzyme which is involved in glycogen degradation. This enzyme has two independent catalytic activities which occur at different sites on the protein: a 4-alpha-glucotransferase activity and a amylo-1,6-glucosidase activity. Mutations in this gene are associated with glycogen storage disease although a wide range of enzymatic and clinical variability occurs which may be due to tissue-specific alternative splicing. Alternatively spliced transcripts encoding different isoforms have been described. [provided by RefSeq, Jul 2008]</p>