

## Product datasheet for SC119740

### AGL (NM\_000642) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	AGL (NM_000642) Human Untagged Clone
Tag:	Tag Free
Symbol:	AGL
Synonyms:	GDE
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC119740 sequence for NM_000642 edited (data generated by NextGen Sequencing)

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ATGGGACACAGTAAACAGATTTCGAATTTTACTTCTGAACGAAATGGAGAACTGGAAAAG
ACCTCTTCAGACTTGAACAAGGTATGAGCTACAGTTCCGATTAGGCCCACTTTACAG
GGAAAAGCAGTTACCGTGTATACAAATTACCCATTTCTGGAGAAACATTTAATAGAGAA
AAATTCGTTCTCTGGATTGGGAAAATCCAACAGAAAGAGAAGATGATTCTGATAAATAC
TGTAACCTTAATCTGCAACAATCTGGTTCATTTTCAGTATTATTTCCCTCAAGGAAATGAG
AAAAGTGGTGGAGGTTACATAGTTGTGGACCCCATTTTACGTGTTGGTGTGATAATCAT
GTGCTACCCTTGGACTGTGTTACTCTTCAGACATTTTTAGCTAAGTGTGGGACCTTTT
GATGAATGGGAAAGCAGACTTAGGGTTGCAAAAAGAATCAGGCTACAACATGATTCATTTT
ACCCCATTCAGACTCTTGGACTATCTAGGTCATGCTACTCCCTTGCCAATCAGTTAGAA
TTAAATCTGACTTTTCAAGACCTAATAGAAAGTATACCTGGAATGATGTTGGACAGCTA
GTGGAAAATTAAGGAATGGAATGTTATTTGTATTACTGATGTTGTCTACAATCAT
ACTGCTGTAATAGTAAATGGATCCAGGAACATCCAGAATGTGCCTATAATCTTGTGAAT
TCTCCACACTTAAACCTGCCTGGGTCTTAGACAGAGCACTTTGGCGTTTCTCCTGTGAT
GTTGCAGAAGGGAAATACAAAGAAAAGGGAATACCTGCTTTGATTGAAAATGATCACCAT
ATGAATCCATCCGAAAATAATTTGGGAGGATATTTTCCAAGCTTAACTTTGGGAA
TTTTTCCAAGTAGATGTCAACAAAGCGGTTGAGCAATTTAGAAGACTTCTTACACAAGAA
AATAGGCGAGTAACCAAGTCTGATCCAAACCAACACCTTACGATTATTCAGATCCTGAA
TACAGACGGTTTGGCTGTACTGTAGATATGAACATTGCACTAACGACTTTCATACCACAT
GACAAGGGGCCAGCAGCAATTGAAGAATGCTGTAATTGTTTCATAAAAAGAAATGGAGGAA
TTAAATTCAGAGAAGCATCGACTCATTAACTATCATCAGGAACAGGCAGTTAATTGCCTT
TTGGGAAATGTGTTTTATGAACGACTGGCTGGCCATGGTCCAAAACCTAGGACCTGTCACT
AGAAAGCATCCTTTAGTTACCAGGTATTTTACTTTCCATTTGAAGAGATAGACTTCTCC
ATGGAAGAATCTATGATTCATCTGCCAAATAAGCTTGTGTTTCTGATGGCACACAATGGA
TGGGTAATGGGAGATGATCCTCTCGAACTTTGCTGAACCGGGTTCAGAAAGTTACCTA
AGGAGAGAACTTATTTGCTGGGAGACAGTGTTAAATTACGCTATGGGAATAAACAGAG
  
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GACTGTCCTTATCTCTGGGCACACATGAAAAATACACTGAAATAACTGCAACTTATTTCCAGGGAGTACGTCTTGATAACTGCCACTCAACACCTCTTCACGTAGCTGAGTACATGTTGATGCTGCTAGGAATTTGCAACCAATTTATATGTAGTAGCTGAACTGTTACAGGAAAGTGAAGATCTGGACAATGTCTTTGTTACTAGACTGGGCATTAGTTCCTTAATAAGAGAGGCCAATGAGTGCATATAATAGTCATGAAGAGGGCAGATTAGTTTACCGATATGGAGGAGAACCTGTTGGATCCTTTGTTGAGCCCTGTTGAGGCCTTAATGCCAGCTATTGCACATGCCCTGTTTATGGATATTACGCATGATAATGAGTGCCTATTGTGCATAGATCAGCGTATGATGCTCTTCCAAGTACTACAATTGTTTCTATGGCATGTTGTGCTAGTGGAAAGTACAAGAGGCTATGATGAATTAGTGCCTCATCAGATTTTCAGTGGTTTCTGAAGAACGGTTTTACACTAAGTGAATCCTGAAGCATTGCCTTCAAACACAGGTGAAGTTAATTTCAAAGCGGCATTATTGCCAGCAGGTGCTATCAGTAACTTCATCAGGAGCTTGGAGCCAAGGGTTTTATTCCAGGTGTATGTGGATCAAGTTGATGAAGACATAGTGGCAGTAACAAGACACTCACCTAGCATCCATCAGTCTGTTGGCTGTATCTAGAAGTCTTTCCAGGAATCCCAAGACTTCATTTTACAGCAAGGAAGTGCCTCAAATGTGCATCCCTGGCAAAATGAAGAAGTAGTTCTTGAAGCTAGAACTATTGAGAGAAACACGAAACCTTATAGGAAGGATGAGAATTCATCAATGGAACCAAGATATCACAGTAGAAATTAGAGAACATATTCAGCTTAATGAAAGTAAAATTTGTTAAACAAAGCTGGAGTTGCCACAAAAGGGCCCAATGAATATATTCAAGAAATAGAATTTGAAAACCTGTCTCCAGGAAGTGTATTATATTCCAGAGTTAGTCTTGATCCACATGCACAAGTCGCTGTTGGAATCTTCAAATCATCTGACACAATTCAGTCTCACTTTAAATCTGGCAGCCTAGCTGTTGACAATGCAGATCCTATATTAATAATTCCTTTTGCTTCTCTTGCCTCCAGATTAAGCTTTGGCTGAGCTAAATCAGATCCTTTACCGATGTGAATCAGAAGAAAAGGAAGTGGTGGAGGGTCTATGACATACCAAACCTGGTCAGCCCTAAATATGCAGGTCTTCAAGGTTAATGTCTGTATTGGCAGAAAATGAAGCAAAAGAAATGACTTGGGGCATCCTTTTTGTAATAATTTAGATCTGGAGATTGGATGATTGACTATGTCAGTAACCGGCTTATTTACAGATCAGGAATTTGCTGAAGTTGGTAAATGGTTGCAGGCTATGTTCTTCTACCTGAAGCAGATCCACGTACCTTATCCCATGTTACTTTGATGCTATATTAATTTGGTGCATATACCACTCTTCTGGATACAGCATGGAAGCAGATGTCAAGCTTTGTTTCCAGAAATGGTTCAACCTTTGTGAAACACCTTTCATTGGGTTCCAGTTCAACTGTGTGGAGTAGGAAAATCCCTCCCTGCCAATCTTTTCCCTGCCCTAATGGATGTACCTTATAGGTTAAATGAGATCACAAAAGAAAAGGAGCAATGTGTGTTTTCTAGCTGCAGGCTTACCTCATTCTTTCTTCTGGTATTTTCCGCTGCTGGGGAAGGATACTTTTTATGCACCTAGAGGTACTGCTGATTACTGGACGCTATGTAGAAAGCCAGGAATATTATTTTAGCATTTGCGGGTACCCTGAGGCATGGTCTCATTCTAATCTACTGGTGAAGGAATTTATGCCAGATACAATTGTCCGGATGCTGTGTGGTGGTGGCTGCAGTGTATCCAGGATTACTGTAATAATGGTTCCAAATGGTCTAGACATTCTCAAGTGCACAGTTTCCAGAATGTATCCTACAGATGATTCTGCTCCTTTGCCTGCTGGCACACTGGATCAGCCATTGTTGAAGTCATACAGGAAGCAATGCAAAAACACATGCAGGGCATAACAGTCCGAGAAAGGAATGCTGGTCCCCAGATAGATCGAAACATGAAGGACGAAGGTTTTAATAAAGTGCAGGAATGTTGATGAAGAAACAGGATTTGTTTATGGAGGAAATCGTTTCAATTGTGGCAGATGGATGATAAAAATGGGAGAAAGTGACAGAGCTAGAAAACAGAGGAATCCCAGCCACACCAAGAGATGGGTCTGCTGTGAAATTTGTGGCCTGAGTAAATCTGCTGTTCCGCTGGTTGCTGGAATTTCCAAAAAATATTTTCCCTTATCATGAAGTCAAGTAAAAAGACATGGAAAGGCTATAAAGGTCTCATATGATGAGTGAACAGAAAAATACAAGACAACCTTTGAAAAGCTATTTTCATGTTTCCGAAGACCCTTCAGATTTAAATGAAAAGCATCCAATCTGGTTCCAAAACGTGGCATATACAAAAGATAGTTATGGAGCTTCAAGTCTTGGTGTGACTATCAGCTCAGGCCTAATTTTACCATAGCAATGGTTGTGGCCCTGAGCTCTTTACTACAGAAAAAGCATGGAAGCTTTGGAGATTGCAGAAAAAATTTGCTTGGTCCCCTTGGCATGAAAACCTTTAGATCCAGATGATATGGTTTACTGTGGAATTTATGACAATGCATTAGACAATGACAACACTACAATCTTGCTAAAGGTTTCAATTATCACCAAGGACCTGAGTGGCTGTGGCTATTGGGTATTTTCTTCGTGCAAAATATATTTTCCAGATTGATGGGCCCGGAGACTACTGCAAGACTATAGTTTTGTAAATAATGTTCTTTCCGACATTATGTTTCATCTTGAGAGATCCCCTTGGAAAGGACTCCAGAAGTACCAATGAGAATGCCAGTACTGTCTTTTCCAGTGTGAAACACAAGCCTGGTCAATTGCTACTATTCTTGAGACACTTTATGATTTATAG

Clone variation with respect to NM\_000642.2  
894 c=>t

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_000642 unedited  
NNGGGTCAAATTTGTATACGACTCACTATAGGCGGCCGGAATTCGCACGAGGGGCGAG  
TGC GCGCACG GCCAGGTTGGGTACCGGGTGC GCCCAGGAACCCGCGCAGGCGAAGTCGC  
TGAGACTCTGCCTGCTTCTCACCAGCTGCCTCGGCGCTGCCCCGGTCGCTCGCCGCCCC  
TCCCTTTGCCCTTCACGGCGCCCGGCCCTCCTTGGGCTGCGGCTTCTGTGCGAGGCTGGG  
CAGCCAGCCCTTCCCCTTCTGTTTCTCCCCGTCCCCTCCCCCGACCGTAGCACCAGAGT  
CGCGGGTCTGCAGTGCCCCAGAAGCCGCACGTATAACTCCCTCGGCGGGTAACCTATTC  
GACTGTGGAGTTCTTTAATTCTTATGAAAGATTTCAAATCCTCTGGAAGCCAAAATGGG  
ACACAGTAAACAGATTGGAATTTACTTCTGAACGAAATGGAGAACTGGAAAAGACCT  
CTTCAGACTTGAACAAGGGTATGAGCTACAGTTCGATTAGGCCCACTTTACAGGGAAA  
AGCAGTTACCGTGTATACAAATTACCCATTTCTGGAGAAACATTTAATAGAGAAAAATT  
CCGTTCTCTGGATTGGGAAAATCCAACAGAAAGAGAAGATGATTCTGATAAATACTGTAA  
ACTTAATCTGCAACAATCTGGTTCATTTAGTATTATTTCTTCAAGGAAATGAGAAAAG  
TGGTGGAGGTTACATAGTTGTGGACCCCATTTACGTGTTGGTGCTGATAATCATGTGCT  
ACCCTTGGACTGTNTACTCTTCAGACATTTTTAGCTAAGTGTGGGACCTTTTGATGA  
ATGGGAAAAGCAGACTTAGGTTGCCAAAGAATCAGGGCTACACATGATCATTTACCCCTT  
GCAGACTCTGGNCTT

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_000642

**Insert Size:**

8000 bp

**OTI Disclaimer:**

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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\\_000642.1](#), [NP\\_000633.1](#)

**RefSeq Size:**

7367 bp

**RefSeq ORF:**

4599 bp

**Locus ID:**

178

**UniProt ID:**

[P35573](#)

**Cytogenetics:**

1p21.2

**Protein Families:** Druggable Genome

**Protein Pathways:** Metabolic pathways, Starch and sucrose metabolism

**Gene Summary:** 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]  
Transcript Variant: This variant (1) differs in the 5' UTR, compared to variant 4. Variants 1, 2, 3 and 4 encode the same isoform (isoform 1).