

Product datasheet for **RG202805**

Pancreatic alpha amylase (AMY2A) (NM_000699) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pancreatic alpha amylase (AMY2A) (NM_000699) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Pancreatic alpha amylase
Synonyms:	AMY2; PA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG202805 representing NM_000699
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAAGTTCTTTCTGTTGCTTTTACCATTGGGTTCTGCTGGGCTCAGTATTCGCCAAATACACAACAAG
 GACGGACATCTATTGTTCACTGTTGAATGGCGATGGGTTGATATTGCTCTTGAATGTGAGCGATATTT
 AGCTCCGAAGGGATTTGGAGGGTTTCAAGTCTCTCCACCAAAATGAAAATGTTGCAATTTACAACCTTTT
 AGACCTTGGTGGGAAAGATACCAACCAGTTAGCTATAAATTATGCACAAGATCTGGAAATGAAGATGAAT
 TTAGAAACATGGTACTAGATGTAACAATGTTGGGTTCTGATTTATGTGGATGCTGTAATTAATCATAT
 GTGTGGTAACGCTGTGAGTGCAGGAACAAGCAGTACCTGTGGAAGTACTTCAACCCTGGAAGTAGGGAC
 TTTCCAGCAGTCCCATATTTGGATGGGATTTCAATGATGGTAAATGTAAAAGTGAAGTGGAGATATCG
 AGAACTACAATGATGCTACTCAGGTGAGAGATTGTCGCTGACTGGTCTTCTTGATCTTGCACTGGAGAA
 GGATTACGTGCGTTCTAAGATTGCCGAATATATGAACCATCTCATTGACATTGGTGTTCAGGGTTCAGA
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 GTAAGTGGTCCCTGCAGGAAGTAAACCTTTCATTTACCAGGAGGTAATTGATCTGGGTGGTGGACCAAT
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 TCTTACCTTCTGGGATGCTAGGCTGTACAAAATGGCAGTTGGATTTATGCTTGTCTCATCCTTACGGATT
 ACACGATAATGTCAAGTACCCTTGGCCAAGACAGTTTCAAAAATGGAACGATGTAATGATTGGGTTG
 GGCCACCAATAATAATGGAGTAATTAAGAAGTACTATTAATCCAGACACTACTGTGGCAATGACTG
 GGTCTGTGAACATCGATGGCGCCAATAAAGGAACATGGTTATTTCCGCAATGTAGTGGATGGCCAGCCT
 TTTACAAATTGGTATGATAATGGGAGCAACCAAGTGGCTTTTGGGAGAGGAAACAGAGGATTCATTGTTT
 TCAACAATGATGACTGGTCATTTTCTTTAACTTTGCAAAGTGGTCTTCTGCTGGCACATACTGTGATGT
 CATTCTGGAGATAAAATTAATGGCAATGACAGGCATTAATAATTTACGTTTCTGATGATGGCAAAGCT
 CATTCTTCTATTAGTAAGTCTGCTGAAGATCCATTTATTGCAATTCATGCTGAATCTAAATTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG202805 representing NM_000699
 Red=Cloning site Green=Tags(s)

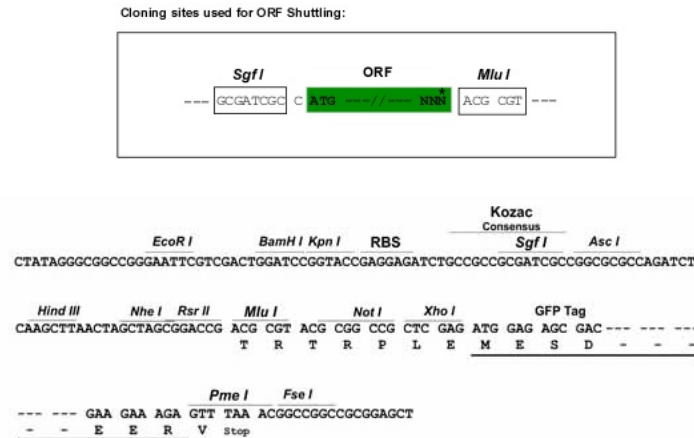
MKFFLLLFITGFCWAQYSPNTQQGRTSIVHLFEWRWDIALEECERYLAPKGGVQVSPNENVAIYNPF
 RPWWERYQPVSYKLCTRSNGNEDEFNMVTRCANNVGVRIYVDAVINHMCNAVSAGTSSTCGSYFNPGSRD
 FPAVPYSGWDFNDGKCKTGSVDIENYNDATQVRDCRLTGLLDLALAEKDYVRSKIAEYMNHLIDIGVAGFR
 LDASKHMWPGDIKAILDKLHNLNSNWFPAGSKPFIYQEVIDLGGPEIKSSDYFGNGRVTEFKYGAKLGTV
 IRKWNGEKMSYLKNWGEWGFVPSDRALVFVDNHDNQRGHGAGGASILTFWDARLYKMAVGFMLAHPYGF
 TRVMSSYRWRPQFQNGNDVNDWVPPNNGVIKEVTINPDTCGNDWVCEHRWRQIRNMVIFRNVDGQP
 FTNWDYDNGSNQVAFGRNRFIVFNDDWSFSLTLQTGLPAGTYCDVISGDKINGNCTGIKIYVSDDGKA
 HFSISNSAEDPFIHIAESKL

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_000699

ORF Size: 1533 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_000699.3](#)

RefSeq Size: 1660 bp

RefSeq ORF: 1536 bp

Locus ID: 279

UniProt ID: [P04746](#)

Cytogenetics: 1p21.1

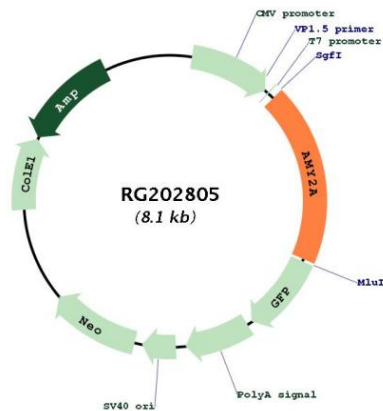
Domains: alpha-amylase, Amy_C, Amy

Protein Families: Secreted Protein

Protein Pathways: Metabolic pathways, Starch and sucrose metabolism

Gene Summary: This gene encodes a member of the alpha-amylase family of proteins. Amylases are secreted proteins that hydrolyze 1,4-alpha-glucoside bonds in oligosaccharides and polysaccharides, catalyzing the first step in digestion of dietary starch and glycogen. This gene and several family members are present in a gene cluster on chromosome 1. This gene encodes an amylase isoenzyme produced by the pancreas. [provided by RefSeq, Jan 2015]

Product images:



Circular map for RG202805