

Product datasheet for **RC212793**

Salivary alpha amylase (AMY1B) (NM_001008218) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Salivary alpha amylase (AMY1B) (NM_001008218) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Salivary alpha amylase
Synonyms:	AMY1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC212793 representing NM_001008218
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAGCTCTTTTGGTTGCTTTTACCATTGGGTTCTGCTGGGCTCAGTATTCCTCAAATACACAACAAG
 GACGAACATCTATTGTTTCATCTGTTGAATGGCGATGGGTTGATATTGCTTGAATGTGAGCGATATTT
 AGCTCCCAAGGGATTTGGAGGGTTTCAGGTCTCTCCACCAAATGAAAATGTTGCCATTCACAACCCTTTC
 AGACCTTGGTGGGAAAGATACCAACCAGTTAGCTATAAATTATGCACAAGATCTGGAAATGAAGATGAAT
 TTAGAAACATGGTACTAGTGAACAATGTTGGGTTCTGATTTATGTGGATGCTGTAATTAATCATAT
 GTGTGGTAATGCTGTGAGTGCAGGAACAAGCAGTACCTGTGGAAGTACTTCAACCCTGGAAGTAGGGAC
 TTTCCAGCAGTCCCATATTTCTGGATGGGATTTAATGATGGTAAATGTAAGTGAAGTGGAGATATCG
 AGAACTATAATGATGCTACTCAGGTGAGAGATTGTCGTCTGTCTGGTCTTCTCGATCTTGCCTGGGAA
 GGATTATGTGCGTTCTAAGATTGCCGAATATATGAACCATCTCATTGACATTGGTGTTCAGGGTTCAGA
 ATTGATGCTTCCAAGCAGATGTGGCCTGGAGACATAAAGGCAATTTTGGACAACTGCATAATCTAAACA
 GTAACCTGGTCCCGAAGGTAGTAAACCTTTCATTTACCAGGAGGTAATTGATCTGGGTGGTGGACCAAT
 TAAAAGCAGTACTACTTTGGTAAATGGCCGGTGACAGAAATCAAGTATGGTGCAAACTCGGCACAGTT
 ATTCGCAAGTGGAAATGGAGAGAAGATGTCTTACTTAAAGAAGTGGGAGAAAGGTTGGGTTTTCATGCCTT
 CTGACAGAGCGCTTGTCTTTGTGGATAACCATGACAATCAACGAGGACATGGCGCTGGAGGAGCCTCTAT
 ACTTACCTTCTGGGATGCTAGGCTGTACAAAATGGCAGTTGGATTTATGCTTGTCTCATCCTTATGGATT
 ACACGTAATGTCAAGTACCCTGGCCAAGATATTTGAAAATGAAAAGATGTAATGATTGGGTTG
 GGCCACCAAATGATAATGGAGTAACTAAAGAAGTACTATTAATCCGGACACTACTTGTGGCAATGCTG
 GGTCTGTGAACATCGATGGCGCCAATAAGGAACATGGTTAATTTCCGCAATGTAGTGGATGGCCAGCCT
 TTTACAACTGGTATGATAATGGGAGCAACCAAGTGGCTTTTGGGAGAGGAAACAGAGGATTCATTGTTT
 TCAACAATGATGACTGGACATTTTCTTTAACTTTGCAAACCTGGTCTTCTGCTGGCACATACTGTGATGT
 CATTTCTGGAGATAAAATTAATGGCACTGCACAGGCATTAATACTACGTTTCTGATGATGGCAAAGCT
 CATTTTCTATTAGTAACTCTGCTGAAGATCCATTTATTGCAATTCATGCTGAATCTAAATTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC212793 representing NM_001008218
 Red=Cloning site Green=Tags(s)

MKLFWLLFTIGFCWAQYSSNTQQGRTSIVHLFEWRWVDIALECERYLAPKGGVQVSPNENVAIHNP
 RPWWERYQPVSYKLCRSGNEDEFNMVTRCANNVGVRIYVDAVINHMCNAVSAGTSSTCGSYFNPGRD
 FPAVPYSGWDFNDGKCKTSGSDIENYNDATQVRDCRLSGLLDLALGKDYVRSKIAEYMNHLIDIGVAGFR
 IDASKHMWPGDIKAILDKLHNLNSNWFPEGSKPFYQEVIDLGGEPKSSDYFGNGRVTEFKYGA
 LKLTVIRKWNGEKMSYLKNWEGWGFMPDRALVFDNHDNRGHGAGGASILTFWDARLYKMAVGFMLAHPYGF
 TRVMSSYRWPYFENGKDVNDWVGPPNDNGVTKEVTINPDTCGNDWVCEHRWRQIRNMVFRNVVDGQP
 FTNWDYDNGSNQVAFGRGNRGIIVFNDDWTFSLTLQTGLPAGTYCDVISGDKINGNCTGIKIYVSDDGKA
 HFSISNSAEDPFIATHAESKL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg3083_c07.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001008218

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001008218.1](#), [NP_001008219.1](#)

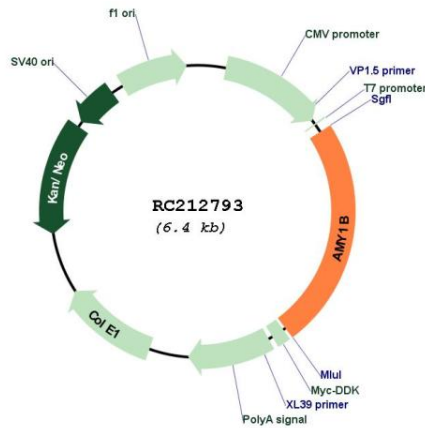
RefSeq Size: 1838 bp

RefSeq ORF: 1536 bp

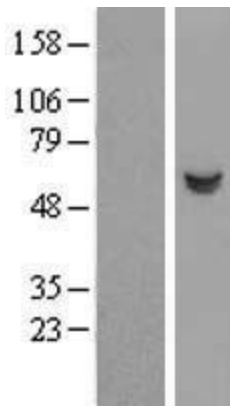
Locus ID: 277

UniProt ID: [P04745](#)
 Cytogenetics: 1p21.1
 Protein Pathways: Metabolic pathways, Starch and sucrose metabolism
 MW: 57.77 kDa
 Gene Summary: Amylases are secreted proteins that hydrolyze 1,4-alpha-glucoside bonds in oligosaccharides and polysaccharides, and thus catalyze the first step in digestion of dietary starch and glycogen. The human genome has a cluster of several amylase genes that are expressed at high levels in either salivary gland or pancreas. This gene encodes an amylase isoenzyme produced by the salivary gland. [provided by RefSeq, Jul 2008]

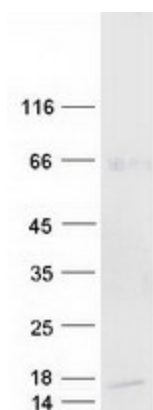
Product images:



Circular map for RC212793



Western blot validation of overexpression lysate (Cat# [LY423396]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC215827] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified AMY1B protein (Cat# [TP312793]). The protein was produced from HEK293T cells transfected with AMY1B cDNA clone (Cat# RC212793) using MegaTran 2.0 (Cat# [TT210002]).