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Product datasheet for RC203812

AMY2B (NM_020978) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AMY2B (NM_020978) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AMY2B
Synonyms:	AMY2; AMY3; HXA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC203812 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGTTCTTTCTGTTGCTTTTCACCATTGGGTTCTGCTGGGCTCAGTATTCCCCAAATACACAACAAG
GACGGACATCTATTGTTCATCTGTTTGAATGGCGATGGGTTGATATTGCTCTTGAATGTGAGCGATATTT
AGCTCCCAAGGGATTTGGAGGGGTTCAGGTCTCTCCACCAAATGAAAATGTTGCAATTCACAACCCTTTC
AGACCTTGGTGGGAAAGATACCAACCAGTTAGCTATAAATTATGCACAAGATCTGGAAATGAAGATGAAT
TTAGAAACATGGTGACTAGATGTAACAATGTTGGGGTTCGTATTTATGTGGATGCTGTAATTAATCATAT
GTCTGGTAATGCTGTGAGTGCAGGAACAAGCAGTACCTGTGGAAGTTACTTCAACCCTGGAAGTAGGGAC
TTTCCAGCAGTCCCATATTCTGGATGGGATTTTAATGATGGTAAATGTAAAACTGGAAGTGGAGATATCG
AGAACTACAATGATGCTACTCAGGTCAGAGATTGTCGTCTGGTTGGTCTTCTTGATCTTGCACTGGAGAA
AGATTATGTGCGTTCCAAGATTGCCGAATATATGAATCATCTCATTGACATTGGTGTTGCAGGGTTCAGA
CTTGATGCTTCCAAGCACATGTGGCCTGGAGACATAAAGGCAATTTTGGACAAACTGCATAATCTAAACA
GTAACTGGTTCCCTGCAGGAAGTAAACCTTTCATTTACCAGGAGGTAATTGATCTGGGTGGTGAGCCAAT
TAAAAGCAGTGACTACTTTGGAAATGGCCGGGTGACAGAATTCAAGTATGGTGCAAAACTCGGCACAGTT
ATTCGCAAGTGGAATGGAGAGAAGATGTCTTACCTAAAGAACTGGGGAGAAGGTTGGGGTTTCATGCCTT
CTGACAGAGCACTTGTCTTTGTGGATAACCATGACAATCAACGAGGACATGGGGCTGGAGGAGCCTCTAT
TCTTACCTTCTGGGATGCTAGGCTGTATAAAATGGCAGTTGGATTTATGCTTGCTCATCCTTATGGTTTT
ACACGAGTAATGTCAAGCTACCGTTGGCCAAGACAGTTTCAAAATGGAAACGATGTTAATGATTGGGTTG
GGCCACCAAATAATAATGGAGTAATTAAAGAAGTTACTATTAATCCAGACACTACTTGTGGCAATGACTG
GGTCTGTGAACATCGATGGCGCCAAATAAGGAACATGGTTAATTTCCGCAATGTAGTGGATGGCCAGCCT
TTTACAAACTGGTATGATAATGGGAGCAACCAAGTGGCTTTTGGGAGAGGAAACAGAGGATTCATTGTTT
TCAACAATGATGACTGGACATTTTCTTTAACTTTGCAAACTGGTCTTCCTGCTGGCACATACTGTGATGT
CATTTCTGGAGATAAAATTAATGGCAATTGCACAGGCATTAAAATCTACGTTTCTGACGATGGCAAAGCT
CATTTTTCTATTAGTAACTCTGCTGAGGATCCATTTATTGCAATTCATGCTGAATCTAAATTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC203812 protein sequence
Red=Cloning site Green=Tags(s)

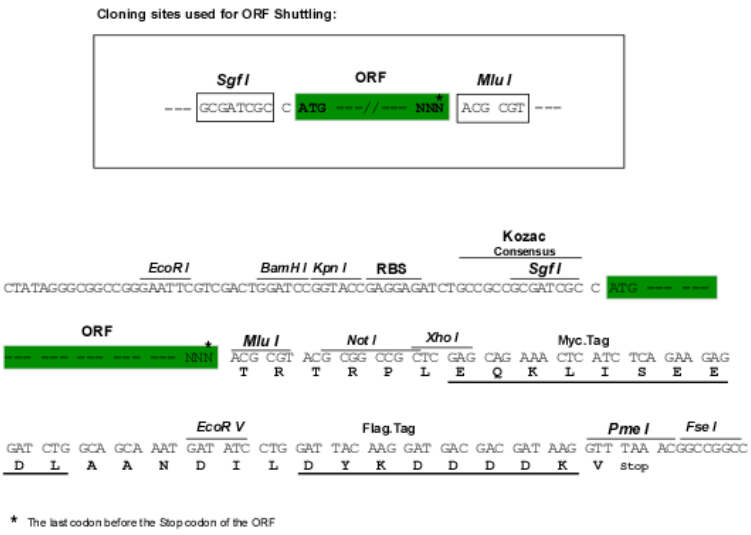
MKFFLLLFTIGFCWAQYSPNTQQGRTSIVHLFEWRWVDIALECERYLAPKGFGGVQVSPPNENVAIHNPF
RPWWERYQPVSYKLCTRSGNEDEFRNMVTRCNNVGVRIYVDAVINHMSGNAVSAGTSSTCGSYFNPGSRD
FPAVPYSGWDFNDGKCKTGSGDIENYNDATQVRDCRLVGLLDLALEKDYVRSKIAEYMNHLIDIGVAGFR
LDASKHMWPGDIKAILDKLHNLNSNWFPAGSKPFIYQEVIDLGGEPIKSSDYFGNGRVTEFKYGAKLGTV
IRKWNGEKMSYLKNWGEGWGFMPSDRALVFVDNHDNQRGHGAGGASILTFWDARLYKMAVGFMLAHPYGF
TRVMSSYRWPRQFQNGNDVNDWVGPPNNNGVIKEVTINPDTTCGNDWVCEHRWRQIRNMVNFRNVVDGQP
FTNWYDNGSNQVAFGRGNRGFIVFNNDDWTFSLTLQTGLPAGTYCDVISGDKINGNCTGIKIYVSDDGKA
HFSISNSAEDPFIAIHAESKL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6195_f04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_020978

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_020978.4

RefSeq Size: 2253 bp

RefSeq ORF: 1536 bp

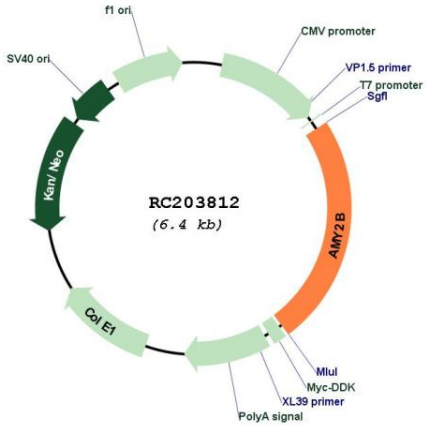
Locus ID: 280

UniProt ID: P19961

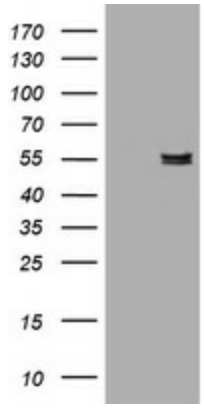
Cytogenetics: 1p21.1

Domains:	alpha-amylase, Aamy_C, Aamy
Protein Families:	Secreted Protein
Protein Pathways:	Metabolic pathways, Starch and sucrose metabolism
MW:	57.7 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 pancreas. [provided by RefSeq, Jun 2013]

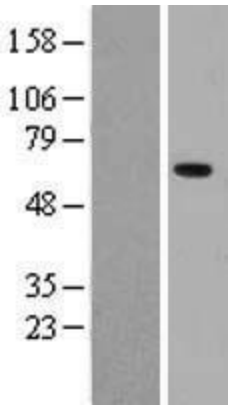
Product images:



Circular map for RC203812



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY AMY2B (Cat# RC203812, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-AMY2B(Cat# [TA505107]). Positive lysates [LY402818] (100ug) and [LC402818] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402818]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203812 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).