

Product datasheet for **RC224855**

AP2 alpha (AP2A1) (NM_014203) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AP2 alpha (AP2A1) (NM_014203) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AP2 alpha
Synonyms:	ADTAA; AP2-ALPHA; CLAPA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC224855 representing NM_014203
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCGGCCGTGTCCAAGGGCGATGGGATGCGGGGGCTCGCGGTGTTTCATCTCCGACATCCGGAAGTGA
 AGAGCAAAGAGGCGGAAATTAAGAGAATCAACAAGGAAGTGGCCAACATCCGCTCCAAGTCAAAGGAGA
 CAAAGCCTTGGATGGCTACAGTAAGAAAAATATGTGTGTAAACTGCTTTTCATCTTCTGCTTGGCCAT
 GACATTGACTTTGGGCACATGGAGGCTGTGAATCTGTTGAGTTCCAATAAATACACAGAGAAGCAAATAG
 GTTACCTGTTTCTGTGCTGGTGAAGTCTGAACTCGGAGCTGATCCGCCTCATCAACAACGCCATCAA
 GAATGACCTGGCCAGCCGAACCCACCTTCATGTGCCTGGCCCTGCACTGCATCGCCAACGTGGGCAGC
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 GCCGGATCGTCTCCTCTGCCTCCACCGACCTCCAGGACTACACCTACTACTTCGTCACAGCACCTGGCT
 CTCGGTGAAGCTCCTGCGGCTGCTGCAAGTACCCGCCTCCAGAGGATGCGGCTGTGAAGGGGCGGCTG
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 GATCGTACCAACCGTATGACGTCCAGGGCTATGCCGCAAGACCGTCTTTGAGGCGCTCCAGGCCCT
 GCCTGTCACGAGAACATGGTGAAGTTGGCGGCTACATCCTTGGGGAGTTTGGAACTGATTGCTGGGG
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 GGCCGGAGGGACCCAGCAGCAACGACATCAACGGGGGATGGAGCCACCCAGCACTGTGTGACGC
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ACGCGTACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC224855 representing NM_014203
 Red=Cloning site Green=Tags(s)

MPAVSKGDGMRGLAVFISDIRNCKSKEAEIKRINKELANIRSKFKGDKALDGYSKKKYVCKLLFIFLLGH
 DIDFGHMEAVNLLSSNKYTEKQIGYLFISVLVNSNSELIRLINNAIKNDLASRNPFTMCLALHCIANVGS
 REMGEAFAADIPRILVAGDSMDSVKQSAALCLLRLYKASPDLVPMGEWTARVVHLLNDQHMVVTAAVSL
 ITCLCKKNPDDFKTCVSLAVSRLSRIVSSASTDLQDYTYFVFPAPWLSVKLLRLLQCYPPEDAAVKGR
 VECLLETVLNKAQEPKSKVQHSNAKNAILFETISLIHVDSEPNLLVRACNQLGQFLQHRETNLRYLAL
 ESMCTLASSEFSHEAVKTHIDTVINALKTERDVSVRQRAADLLYAMCDRSTNAKQIVSEMLRYLETADYAI
 REEIVLVKVAILAKEYAVDYSWYVDTILNLRIRIAGDYVSEEVWYRVLQIVTNRDDVQGYAAKTVFEALQAP
 ACHENMVKVGYYILGEFNLIAGDPRSSPPVQFSLHSHKFLCSVATRALLLSTYIKFINLFPETKATI
 QGVL RAGSQLRNADVELQQRAVEYLTSSVASTDVLATVLEEMPPFPERESSILAKLKRKKGPGAGSALDD
 GRRDPSSNDINGMEPTSTVSTPSPSADLLGLRAAPPAAPPASAGAGNLLVDVFDGPAAPSLGPTPE
 EAFLELEPPAPEPMALLADPAPAADPGPEDIGPPIPEADELLNKFVCKNNGVLFENQLLQIGVKSEFR
 QNLGRMYLFYGNKTSVQFQNFSPTVVHPGDLQTQLAVQTKRVAQVDGGAQVQVNLNIECLRDFLTPPLL
 SVRFRYGGAPQALTLKLPVTINKFFQPTMAAQDFFQRWKQLSLPQQEAQKIFKANHPMDAEVTKAKLLG
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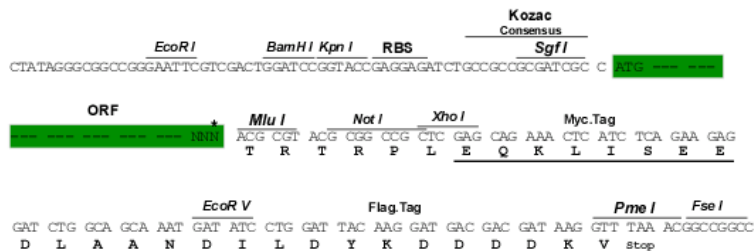
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8044_e08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



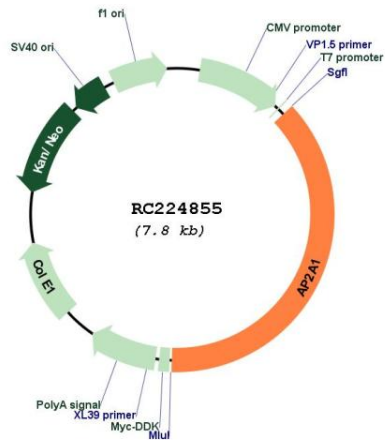
* The last codon before the Stop codon of the ORF

ACCN: NM_014203

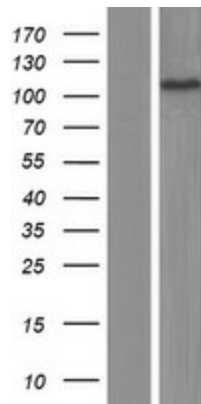
ORF Size: 2931 bp

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_014203.3
RefSeq Size:	3499 bp
RefSeq ORF:	2934 bp
Locus ID:	160
UniProt ID:	O95782
Cytogenetics:	19q13.33
Domains:	Adaptin_N, Alpha_adaptin_C, Alpha_adaptinC2
Protein Pathways:	Endocytosis, Huntington's disease
MW:	107.4 kDa
Gene Summary:	This gene encodes the alpha 1 adaptin subunit of the adaptor protein 2 (AP-2) complex found in clathrin coated vesicles. The AP-2 complex is a heterotetramer consisting of two large adaptins (alpha or beta), a medium adaptin (mu), and a small adaptin (sigma). The complex is part of the protein coat on the cytoplasmic face of coated vesicles which links clathrin to receptors in vesicles. Alternative splicing of this gene results in two transcript variants encoding two different isoforms. A third transcript variant has been described, but its full length nature has not been determined. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC224855



Western blot validation of overexpression lysate (Cat# [LY415440]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224855 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).