

## Product datasheet for **RC203018**

### alpha Adaptin (AP2A2) (NM\_012305) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	alpha Adaptin (AP2A2) (NM_012305) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	alpha Adaptin
Synonyms:	ADTAB; CLAPA2; HIP-9; HIP9; HYPJ
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RC203018 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCGGCCTGTCCAAGGGGACGGGATGCGGGGCTTTCATCTCGGATATCCGCAACTGTA  
AAAGTAAAGAAGCAGAAATAAAAAGGATAAACAAGGAAGTGGCAATATCAGATCAAATTTAAAGGTGA  
CAAGGCTCTTGATGGCTATAGTAAAAAAGTACGTCTGCAAGTTGCTCTTCATCTTTCTCCTTGTCAT  
GACATTGACTTTGGACACATGGAGGCTGTGAACCTGCTGAGTTCAAACAGATACACGGAAAAGCAGATCG  
GCTACCTTTTCATCTCTGTGTTGGTGAACCTCAAACAGTGAAGTCCGCTGATCAACAACGCCATCAA  
GAATGACCTGGCCAGCCCAACCCACCTTCATGGGCCTGGCCCTGCACTGCATCGCCAGCGTGGGCAGC  
CGGGAGATGGCCGAGGCTTCGCCGGGAGATCCCTAAGTCTCGTAGCCGGAGACACTATGGACAGCG  
TGAAGCAGAGCGCGCCCTGTGCTTGTGCGCCTGTACAGGACGTCCTCCCGATCTTGTCCCATGGCGA  
CTGGACATCCCGAGTGGTGCACCTGCTCAATGACCAGCACTTGGGTGTGGTAAGTGCAGCCACAAGTCTG  
ATCACCACCTTTAGCACAGAAGAACCAGAAGAGTTTAAAACCTCCGTGTCTCTGGCTGTCTCTAGGCTAA  
GCAGAATCGTGACGTCTGCATCCACAGATCTCCAGGATTACACTTACTATTTTGTCCCGGCTCCCTGGCT  
GTCTGTCAAAGTCTGAGACTGCTGCAAGTGTACCCACCCAGACCCTGCAGTGGCAGGCGCCCTGACT  
GAGTGCCTGGAGACCATCCTGAACAAAGCCCAAGAACCAGCCCAAGTGAAGAAGTCCAGCACTCCAACG  
CGAAGAATGCCGTGCTCTTCGAGGCCATCAGCTTAATCATTACCATGACAGTGAAGCCAACTGCTCGT  
CCGTGCCTGCAACCAAGTGGGCCAGTTTCTGCAGCACCAGGACCAACCTGCGCTACCTGGCCCTGGAG  
AGCATGTGCAGCTGGCCAGCTCTGAGTTCTCCCATGAGGCTGTCAAGACGCACATCGAGACGGTCAATCA  
ACGCCCTGAAGACTGAGCGGGAGCTGAGCGTGCAGCAGCGGGCCGTGGACCTCTACGCCATGTGCGA  
CGCAGCAACGCCCCACAGATCGTGGCCGAGATGCTGAGCTATCTGGAGACAGTCACTACTCCATCCGA  
GAAGAGATTGTGCTGAAGTTCGCCATCCTGGCTGAGAAGTACGCGGTGGACTACACTGGTATGTGGATA  
CCATCTTGAACCTGATCCGAATTGCTGGTATTACGTGAGTGAAGAGGTGGTACCAGTCACTCAGAT  
CGTCATCAACCGGACGACGTGCAGGGCTACGCGGCAAGACTGTGTTGAGGCTCTTACAGGCTCCCGCG  
TGCCACGAGAACCTGGTCAAAGTGGCGGCTACATCCTGGGGAGTTTGGAACTTATAGCTGGAGACC  
CGAGATCCAGCCGCTGATCCAGTTCACCTGCTGCACTCCAAGTTCACCTGTGCAGCGTCCCCACCCG  
CGCGCTGCTCCTGTCCACCTACATCAAGTTCGTGAACCTTCCCGGAGGTGAAGCCACCATCCAGGAC  
GTGCTGCGCAGCAGCAGCCAGCTCAGGAACGCAGACGTGGAGCTGCAGCAGCGTGTGTGGAGTACCTGC  
GGCTCAGCACCGTGGCCAGCACCAGATTTCTGGCGACCGTGTGGAGGAGATGCCCCATTTCCCGGAGCG  
GGAGTCTCCATCTTGGCAAAGCTCAAGAAGAAGAAGGGCCCCAGCACGGTGCAGACCTGGAGGACACC  
AAGCGGGACAGGAGTGTGGACGTGAACGGGGTCTGAGCCTGCCCCAGCCAGTACCAGCGCCGTGTCTA  
CGCCTTCTCCGTGCGCAGACCTGCTGGTCTCGGGGCTGCCCCCCTGCCCCGCGGGCCCCCACCTC  
CTCCGGCGGCAGCGGGCTGCTCGTGGACGTGTTCTCAGACTCGGCCTCTGTGGTTCGCGCCTCTCGCTCCT  
GGCTCCGAAGACAACCTTGGCAGGTTTGTGTTGTAACAATGGTGTGTTGTTGAAAACAGCTGCTTC  
AAATTGGACTTAAGTCTGAATTTTCGGCAGAATTTAGTTCGGATGTTTATCTTTTATGGTAATAAGACCTC  
CACGAGTTCCTAACTTTACCCCAACACTAATCTGTTTACAGCAGCTTACAGCTAACCTGAACCTGCAG  
ACCAAGCCCGTGGACCCGACCGTGGAGGGGGCGCAGGTGCAGCAGGTGGTCAACATAGAGTGGGTGT  
CCGACTTACGGAGGCGCCAGTCTCAACATTCAGTTCAGGTATGGGGGACCTTCCAGAACGTGTCTGT  
GCAGCTGCCATCACTCTCAACAAATCTTCCAGCCGACAGAAATGGCTTCTCAGGATTTCTTCAACGT  
TGAAGCAGTTGAGCAATCCACAGCAGGAAGTGCAGAACATCTTCAAAGCAAAGCACCAATGGACACAG  
AAGTCAACAAAGCAAGATCATTGGATTGGTTCTGCACTTCTTGAAGAAGTTGATCCTAATCCTGCGAA  
TTTCGTGGGAGTGAATCATCCACACGAAAACCCAGATTGGATGCCTGCTGCGCTTGGAGCCGAAC  
CTGCAAGCCAGATGTACCGCTCACGCTGCGCACAAGTAAGGAAGCCGTTTCTCAGAGATTATGTGAAT  
TGCTCTCAGCGCAGTTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC203018 protein sequence  
 Red=Cloning site Green=Tags(s)

MPAVSKGDGMRGLAVFISDIRNCKSKEAEIKRINKELANIRSKFKGDKALDGYSKKKYVCKLLFIFLLGH  
 DIDFGHMEAVNLLSSNRYTEKQIGYLFISVLVNSNSELIRLINNAIKNDLASRNPFTMGLALHCIASVGS  
 REMAEAFAGEIPKVLVAGDTMDSVKQSAALCLLRLYRTSPDLVPMGDWTSRVVHLLNDQHLGVVTAATSL  
 ITTLAQKNPEEFKTSVSLAVSRLSRIVTSASTDLQDYTYFVFPAPWLSVKLLRLLQCYPDPDPVAVRGRLT  
 ECLETILNKAQEPKSKKQHSNAKNAVLFEAISLIHHHDEPNLLVRACNLGQFLQHRETNLRYLALE  
 SMCTLASSEFSHEAVKTHIETVINALKTERDVSVRQRAVDLLYAMCDRSNAPQIVAEMLSYLETADYSIR  
 EEIVLKVAILAKEYAVDYTWYVDITLNLIRIAGDYVSEEVWYRVIQIVINRDDVQGYAAKTVFEALQAPA  
 CHENLVKVGYYILGEFGNLIAGDPRSSPLIQFHLLHSKFHLCVPTRALLLSTYIKFVNLFPEVKPTIQD  
 VLRSDSQLRNADVELQRAVEYLRLSTVASTDILATVLEEMPPFPERESSILAKLKKKGPSTVTDLEDT  
 KRDRSVDVNGGPEPAPASTSAVSTSPSADLLGLGAAPPAPAGPPPSSGGGGLLVDVFSDSASVVAFLAP  
 GSEDNFARFVCKNNGVLFENQLLQIGLKSEFRQNLGRMFI FYGNKTSQFLNFTPTLICDDLQPNLNLQ  
 TKPVDPTVEGGAQVQVNIIECVSDFTEAPVNLIQFRYGGTFQNVSVQLPITLKNKFFQPTEMASQDFQQR  
 WKQLSNPQQEVQNIKAKHPMDTEVTKAKIIGFGSALLEEVDPNPANFVAGAGIIHTKTTQIGCLLRLEPN  
 LQAQMYRLTLRTSKEAVSQRLCELLSAQF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk6272\\_e10.zip](https://cdn.origene.com/chromatograms/mk6272_e10.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



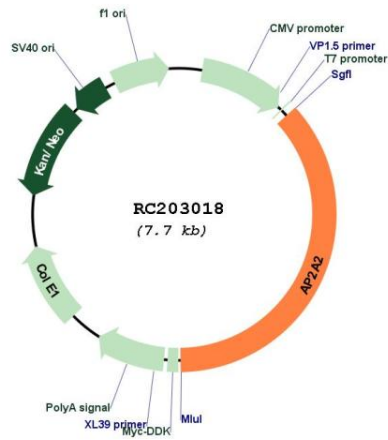
\* The last codon before the Stop codon of the ORF

ACCN: NM\_012305

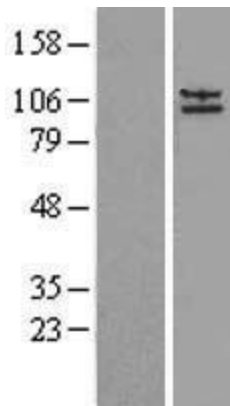
ORF Size: 2817 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_012305.4</a>
<b>RefSeq Size:</b>	4671 bp
<b>RefSeq ORF:</b>	2820 bp
<b>Locus ID:</b>	161
<b>UniProt ID:</b>	<a href="#">O94973</a>
<b>Cytogenetics:</b>	11p15.5
<b>Protein Pathways:</b>	Endocytosis, Huntington's disease
<b>MW:</b>	104 kDa
<b>Gene Summary:</b>	The protein encoded by this gene is a subunit of the AP-2 adaptor protein complex, which is involved in linking lipid and protein membrane components with the clathrin lattice. This interaction supports the formation of clathrin-coated vesicles, and the encoded subunit aids in the process by binding polyphosphoinositide-containing lipids in the cell membrane. [provided by RefSeq, Nov 2016]

Product images:



Circular map for RC203018



Western blot validation of overexpression lysate (Cat# [LY415866]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203018 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).