

Product datasheet for **RC205341**

BAF53A (ACTL6A) (NM_178042) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BAF53A (ACTL6A) (NM_178042) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BAF53A
Synonyms:	ACTL6; Arp4; ARPN-BETA; BAF53A; INO80K
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC205341 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGCGCGCGCTGTACGGGGGAGATGAAGTTGGAGCCCTTGTTTTTGACATTGGATCCTATACTGTGA
 GAGCTGGTTATGCTGGTGAAGACTGCCCAAGGTGGATTTTCTACAGCTATTGGTATGGTGGTAGAAAG
 AGATGACGGAAGCACATTAATGGAATAGATGGCGATAAAGGCAAAACAAGCGGTCACCTACTACATA
 GATACTAATGCTCTGCGTGTCCGAGGGAGAATATGGAGGCCATTTACCTCTAAAAATGGGATGGTTG
 AAGACTGGGATAGTTTCAAGCTATTTGGATCATACCTACAAAATGCATGTCAAATCAGAAGCCAGTCT
 CCATCCTGTTTCATGTCAGAGGCACCGTGAATACTAGAGCAAAGAGAGAAAAGTACAGAGTTAATG
 TTTGAACACTACAACATCCCTGCCTTCTCCTTTGCAAACTGCAGTTTTGACAGCATTTGCTAATGGTC
 GTTCTACTGGGCTGATTTGGACAGTGGAGCCACTCATACCCTGCAATCCAGTCCACGATGGCTATGT
 CCTTCAACAAGGCATTGTGAAATCCCCTCTTGCTGGAGACTTTTACTATGCAGTGCAGAGAACTTTC
 CAAGAAATGAATATTGAATTGGTTCCTCCATATATGATTGCATAAAAGAAGCTGTTTCGTGAAGGATCTC
 CAGCAAATGGAAAAGAAAAGAGAAGTTGCCTCAGGTTACGAGGCTTGGCACAATTATATGTGTAATTG
 TGTATCCAGGATTTTCAAGCTTCGGTACTTCAAGTGTGAGATTCACTTATGATGAACAAGTGGCTGCA
 CAGATGCCAAGTTCATTATGAATCCCAATGGCTACAATTGTGATTTGGTGCAGAGCGGCTAAAGA
 TTCCAGAAGGATTATTTGACCCTTCCAATGTAAGGGGTTATCAGGAAACACAATGTTAGGAGTCAGTCA
 TGTTGTCAACACAAGTGTGGGATGTGTGATATTGACATCAGACCAGTCTCTATGGCAGTGAATAGTG
 GCAGGAGGAAACACACTAATACAGAGTTTACTGACAGGTTGAATAGAGAGCTGTCTCAGAAAATCCTC
 CAAGTATGCGGTTGAAATTGATTGCAAAATAACAACAGTGAACGAGGTTTACTCATGGATTGGCGG
 CTCATTCTAGCCTCTTTGGGTACCTTTCAACAGATGTGGATTTCCAAGCAAGAATATGAAGAAGGAGGG
 AAGCAGTGTGTAGAAAGAAAATGCCCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205341 protein sequence
 Red=Cloning site Green=Tags(s)

MSGGVYGGDEVGALVFDIGSYTVRAGYAGEDCPKVDFPTAIGMVVERDDGSTLMEIDGDKGKQGGPTYYI
 DTNALRVPRENMEAI SPLKNGMVEDWDSFQAILDHTYKMHVKSEASLHPVLMSEAPWNTRAKREKLT
 FEHYNIPAFFLCKTAVLTAFANGRSTGLILDSGATHHTAIPVHDGYVLQGGIVKSPLAGDFITMQCRELF
 QEMNIELVPPYMIASKEAVREGSPANWKRKEKLPQVTRSWHNYMCNCVIQDFQASVLQVSDSTYDEQVAA
 QMPTVHYEFPNGYNCDFGAERLKIPEGLFDP SNVKGLSGNTMLGVSHVVTTSVGMCDIDIRPGLYGSVIV
 AGGNTLIQSFTDRLNRELSQKTPPSMRLKLIANNTTVERRFSSWIGGSILASLGTFFQMWISKQYEYEEGG
 KQCVERKCP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6541_c12.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_178042

ORF Size: 1290 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 Size: 1956 bp

RefSeq ORF: 1164 bp

Locus ID: 86

UniProt ID: [O96019](#)

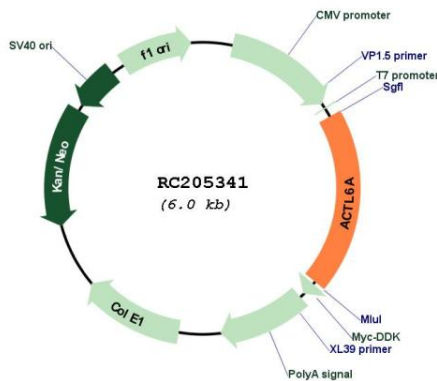
Cytogenetics: 3q26.33

Protein Families: Druggable Genome, Transcription Factors

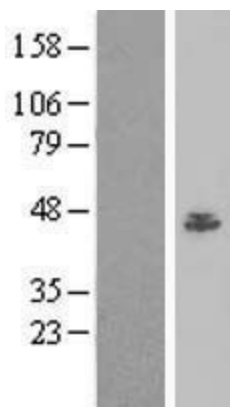
MW: 47.5 kDa

Gene Summary: This gene encodes a family member of actin-related proteins (ARPs), which share significant amino acid sequence identity to conventional actins. Both actins and ARPs have an actin fold, which is an ATP-binding cleft, as a common feature. The ARPs are involved in diverse cellular processes, including vesicular transport, spindle orientation, nuclear migration and chromatin remodeling. This gene encodes a 53 kDa subunit protein of the BAF (BRG1/brm-associated factor) complex in mammals, which is functionally related to SWI/SNF complex in *S. cerevisiae* and *Drosophila*; the latter is thought to facilitate transcriptional activation of specific genes by antagonizing chromatin-mediated transcriptional repression. Together with beta-actin, it is required for maximal ATPase activity of BRG1, and for the association of the BAF complex with chromatin/matrix. Three transcript variants that encode two different protein isoforms have been described. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC205341



Western blot validation of overexpression lysate (Cat# [LY406030]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205341 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).