

Product datasheet for RC219825

FAM107A (NM_007177) Human Tagged ORF Clone

Product data:

OriGene Technologies, Inc.

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Product Type:	Expression Plasmids
Product Name:	FAM107A (NM_007177) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FAM107A
Synonyms:	DRR1; TU3A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	<pre>>RC219825 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)</pre>
	TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCC <mark>GCGATCGC</mark> C
	ATGTACTCGGAGATCCAGAGGGAGCGGGCAGACATTGGGGGCCTGATGGCCCGGCCAGAATACAGAGAGT GGAATCCGGAGCTCATCAAGCCCAAGAAGCTGCTGAACCCCGTGAAGGCCTCTCGGAGTCACCAGGAGCT CCACCGGGAGCTGCTCATGAACCACAGAAGGGGGCCTTGGTGTGGACAGCAAGCCAGAGCTGCAGCGTGTC CTAGAGCACCGCCGGCGGAACCAGCTCATCAAGAAGAAGAAGAAGGAGGAGCTGGAAGCCAAGCGACGGCTGCAGT GCCCCTTTGAGCAGGAGCTGCTGAGACGGCAGCAGAGGCTGAACCAGCTGGAAAAACCACCAGAGAAGGA AGAGGATCACGCCCCCGAGTTTATTAAAGTCAGGGAAAAACCTGCGGAGAATTGCCACACTGACCAGCGAA GAGAGAGAGCTG
	ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGG TTTAA
Protein Sequence:	<pre>>RC219825 protein sequence Red=Cloning site Green=Tags(s)</pre>
	MYSEIQRERADIGGLMARPEYREWNPELIKPKKLLNPVKASRSHQELHRELLMNHRRGLGVDSKPELQRV LEHRRRNQLIKKKKEELEAKRLQCPFEQELLRRQQRLNQLEKPPEKEEDHAPEFIKVRENLRRIATLTSE EREL
	TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Chromatograms:	https://cdn.origene.com/chromatograms/mk6720_e01.zip



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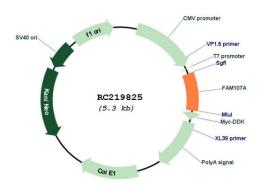
SAM107A (NM_007177) Human Tagged ORF Clone – RC219825

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Image:	Endition Endition Endition OFF Image: I	Cloning Scheme:	Sgfi ORF Miul
 and c c the c c c c c c c c c c c c c c c c c c c	Image: Construct and the function of the state and the dist and the state and the s		Consensus EcoRI BamHIKpnI RBS SgfI CTATAGGGCGGGGAATTCGTCGACTGGATCCGGTACCGGGGAGGAGATCTGCCGCGGCGGCGGCGGCGGCGGAGGAGATTCGTCGACTGGATCGGGTACCGGGGGGGG
 NM_007177 432 bp 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. <u>More info</u> This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene. 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). hod: Carefully open the tube and add 100ul of sterile water to dissolve the DNA. Close the tube and incubate for 10 minutes at room temperature. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 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. Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required. <u>NM_007177.4</u> 	ACCN:NM_007177DRF Size:432 bpDTI 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 infoDTI Annotation:This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.DTI Annotation: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).Econstitution Method:1. Centrifuge at 5,000xg for 5min. 		GAT CTG GCA GCA AAT GAT ATC CTG GAT TAC AAG GAT GAC GAC GAT AAG GTT TAA ACGECCEGECC
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<u>NM 007177.4</u> 3488 bp	RefSeq: NM 007177.4 RefSeq Size: 3488 bp	lote:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with
3488 bp	efSeq Size: 3488 bp	efSeq:	
435 bp	efSeq ORF: 435 bp	-	
		-	435 bp
		RefSeq ORF:	435 bp

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	FAM107A (NM_007177) Human Tagged ORF Clone – RC219825
Locus ID:	11170
UniProt ID:	<u>095990</u>
Cytogenetics:	3p14.3-p14.2
MW:	17.5 kDa
Gene Summary:	Stress-inducible actin-binding protein that plays a role in synaptic and cognitive functions by modulating actin filamentous (F-actin) dynamics. Mediates polymerization of globular actin to F-actin. Also binds to, stabilizes and bundles F-actin. Involved in synaptic function by regulating neurite outgrowth in an actin-dependent manner and for the acquisition of hippocampus-dependent cognitive function, such as learning and long-term memory (By similarity). Plays a role in the actin and microtubule cytoskeleton organization; negatively regulates focal adhesion (FA) assembly promoting malignant glial cell migration in an actin-, microtubule- and MAP1A-dependent manner (PubMed:20543869). Also involved in neuroblastoma G1/S phase cell cycle progression and cell proliferation inhibition by stimulating ubiquitination of NF-kappa-B subunit RELA and NF-kappa-B degradation in a COMMD1- and actin-dependent manner (PubMed:10564580, PubMed:28604741). May play a role in tumor development (PubMed:10564580).[UniProtKB/Swiss-Prot Function]

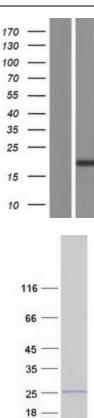
Product images:



Circular map for RC219825

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Western blot validation of overexpression lysate (Cat# [LY416150]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219825 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified FAM107A protein (Cat# [TP319825]). The protein was produced from HEK293T cells transfected with FAM107A cDNA clone (Cat# RC219825) using MegaTran 2.0 (Cat# [TT210002]).

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