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CN: techsupport@origene.cn

Product datasheet for MG219346

Aff1 (NM_133919) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aff1 (NM_133919) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Aff1
Synonyms:	9630032B01Rik; Af; Af4; AW319193; Mllt; Mllt2h; R; Rob
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG219346 representing NM_133919
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCAGCCCATTCCAGCTTGTACAATGAAGATAGAAACCTGCTTCGAATCAGAGAGAAGGAAAGACGCA
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GAGCCCGAGCCTCCGACGACAAACAAATGGCAGCTGGACAACTGGTTGACCAAAGTCAACCAACCCTCAG
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CACCCAAAGGCCCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG219346 representing NM_133919
Red=Cloning site Green=Tags(s)

MAAHSSLYNEDRNLLRIREKERRNQEAHQEKEAFPEKAPLFPEPYKTAKGDELSSRIQTMLGDYEEMKEF
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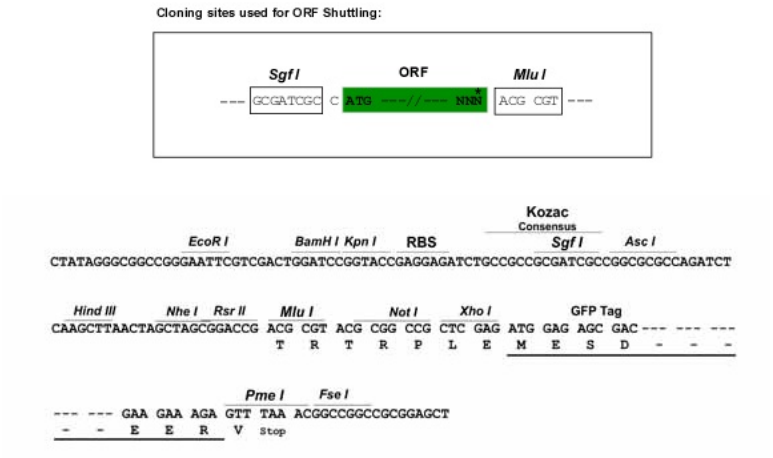
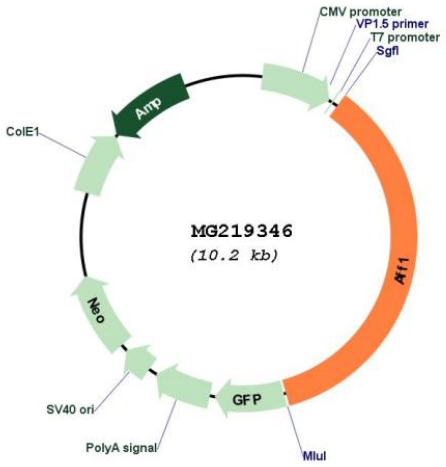
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_133919
ORF Size:	3654 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_133919.4, NP_598680.3
RefSeq Size:	8323 bp
RefSeq ORF:	3657 bp
Locus ID:	17355
Cytogenetics:	5 50.45 cM

Gene Summary: This gene encodes a member of the AF4/ lymphoid nuclear protein related to the Fragile X E syndrome (FRAXE) family of proteins, which have been implicated in human childhood lymphoblastic leukemia, fragile chromosome X intellectual disability, and ataxia. It is the prevalent mixed-lineage leukemia fusion gene associated with spontaneous acute lymphoblastic leukemia. Members of this family have three conserved domains: an N-terminal homology domain, an AF4/ lymphoid nuclear protein domain, and a C-terminal homology domain. Knockout of the mouse gene by homologous recombination severely affects early events in lymphopoiesis, including precursor proliferation or recruitment, but is dispensable for terminal differentiation. In addition, an autosomal dominant missense mutation results in several phenotypes including ataxia and adult-onset Purkinje cell loss in the cerebellum, indicating a role in Purkinje cell maintenance and function. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2017]