OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MC223995

Aff1 (NM_001080798) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aff1 (NM_001080798) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Aff1
Synonyms:	9630032B01Rik; Af; Af4; AW319193; Mllt; Mllt2h; R; Rob
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

Fully Sequenced ORF:

>MC223995 representing NM_001080798
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAAACGAGGATTCTCCCACGAGAGAGTGGTGGAGCCTGCTTGTACAATGAAGATAGAAACCTGCTTC
GAATCAGAGAGAAGGAAAGACGCAACCAAGAAGCTCACCAGGAGAAGGAGGCATTTCCCGAGAAGGCTCC
CCTGTTTCCAGAGCCTTACAAGACTGCAAAAGGCGATGAGCTATCAAGTCGGATCCAGACCATGCTGGGT
GACTATGAGGAGATGAAGGAGTTCCTGAGCAGCAAGTCCCACCCCCACCGCCTGGATGGCTCTGAAGACA
GGCCCGGGAAGCCCAGATATCCCTTAGGTCATGACAGGGGGAACGGGGCTGCATCCAGCTCCCTCCGCAC
ACATGTCTACCACCAGCCTATCCACACTTCTGCTCCCGGATCACGTCCTGTCGGTAACATTAGCCACAGT
CCAAAGATGGCACAGCCAAGGATGGAGCCAAGTCTCCACACCAAAATCTATGATGGCCCACGTCTGACTC
AAGACCACCTCAGTCAGGGACATTGTTCCAGAAAGTGTGACCGAAGAGCTGAAGGAGACTCTGCTCCCGA
GAGGAAGCTCTCGCCCTTGATCTCCTCTTTGCCATCCCCGGTGCCCCCTCTATCACCTGTACATTCCAGG
CTGCAGGGAACCAGCAAGGCTCACAGCAGTGGCGTTAGCAGTAAAAGCTGCTGTGTGGCCAAGTCTTCCA
AGGACTTGGTGGCGAAGGCCCAAGATAAAGAGACTCCTCATGACGGTTTGGTGGCAGTTACCAGCCTTGG
ATCAGCCCCTCCTCAGCCACCTTGCCAGACATTTCCACCCCCTCCTCTCCCCTCAAAAAGTGCTGCAATG
CAGCAGAAGCCCACGGCATATGTCCGTCCCATGGACGGTCAGGATCAGGCTCCCAGTGAGTCCCCCGAGC
TGAAGCTGCCACTGGAGGACTATGGTCAGCAAAGCTTTGAGAAACCAGACCTTAAAGTGCCTGCCAAAGC
CAAGCTCACCAGACTAAGGATGCCCTCTCAGTCGGTGGAGCAGCCGTACTCCAATGAAGTCCATTGCGTT
GAAGAGATTCTGAAGGAAATGACCCACTCGTGGCCACCGCCTCTGACAGCCATACACACACCCAGTACAG
CCGAGCCGTCCAGATTTCCTTTCCCCACAAAGGACCCTCTGCACGTCAGTCCTGCAACCCAGAGCCAAAA
ACAATATGACACGCCTTCAAAAACCCACCCCAATCCCCAGCAAGGAACCTCCATGCTGGAGGACGACCTG
CAGCTCAGCGACAGTGAAGACAGCGACACGGAGCAAGCCACAGAGAAGCCTCCATCCCCACCTGCACCTC
CCAGCGCTCCGCAGACACTTCCCGAGCCCGTGGCCTCAGCACATTCCAGTAGTGGGGAGTCAGAGAGCAG
CGAGTCAGACAGTTCCTCAGACTCTGAGAGTGAGAGCAGCTCCAGCGACAGCGAGGAGGAGGAAGAGAAC
GAGCCCCTGGAGACCCGGGCTCCCGAGCCCGAGCCTCCGACGACAAACAAATGGCAGCTGGACAACTGGT

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TGACCAAAGTCAACCAACCCTCAGTGCCCCTGGATGGCCGGGGGAGCACAGAGTCTCCACAATGGCGCCA
GGAAAGTAAGGGTGTCGCTGAGGGCAGCAGTGACCAGCAGCATCCTGATTCCAAAGACCCTCTCCCAAAG
AGCTCCAGCAAGACTCTCCGGGGTCCCTCTGAGGGGCCCCAGCCTGGGAAGAGGGGCTGTCCGAAATCCC
CCGCTCAACAGGAACCCCCACCTCGGCAAACCGTGGGCAGCAAACAACCCAGGAAACCCGCCAAGGGCTC
CGGCCAGGCAGAGCCCCAGGCCAGCTCGCAGGCAGAGAGTGAAGTAGGACCCCTTCCCTACGGCTCAAAG
GAGCAGACTTCCAAAGACAGACCCAAGGTGAAGACGAAAGGCAGGCCGCGTGCCGTGGGCAGTCGGGAGC
CTAAGCCAGAGGTCCCTGCGCCCACGCCTCAGGCAGCCGTGCCCAGACCGAAGCCGCCTGTGCCCACCCC
CAGTGAGAAGAGGAAGCACAAGAGCTCCACGGCCCCCTCCAAGGCGCCCTCAGCCCCCAGCCTCCGAAG
GACAGTGCTGGGGACAGGAACCCAGAACACTCTGCTCTTGTCTCCTTGACTCAGAGCCAGGGTCCATCCC
ACAGCAGCAGGGGCAGCAGTGGCAGCGTCAGGACTAGTGGCTGCCGACAGGCTGTGATTGCCCAAGGGGA
CGGCTGTAAAGACAAGCTCCTGTTGCCTTTGAGAGACACCAAATTGCTCTCGCCGCTCAGGGACTCCCCA
CCACCGACAAGCTTGGTGGTGAAGATAACCCTAGACCTCCTCACGAGGATTCCCCAGCCTCTGGGGAAGG
GGAGCCGCCCCAGGAAAGCAGAAGACAAGCAGCTGTCAGCAGGGAAGAAGCAGGACTCGGAGACCAAGAG
CTGTGACAGCTCCAGCAGAGTGACCAAGAAGAGAAAGGGTGACCCAGAAAAAGAGCACAGTAACAAGAGA
CACAAACTGGATAAGTCGCAGACTGCGTCATCTTCATCTTCCCATACAGAATCTTCCAGAACAAAAGCGC
CCAGGTCCTCCTCAGAGAACTCAAGAAAGGAAATGCTGCCTCCAGCATCGGCGTCCTCAGTCTCCTCTTC
CTCATCCTCCCAGAAGCCAAGCAGACCTGCACAGAAGAGGCCAAGGCCAGACGAAGACACGTGTAGCCAG
GAACCCCCCAGAAGTGCCAGCAGCACAAAGAGCAGCTCTACAGACCCTCCCGCTCCCAAGCACAGAAAAG
TACAGGCCAGGGGCTCTGAACACAAGGGATCTTCTGGGGATGCTGCGAATGCTGCAAATCCTTTTCCAGT
GCCTTCTTTGCCGAATGGTAACGCTAAACCAGGGAAGCCACAGGTGAAGTCTGACAGACAACAAGCTGAC
TTTCACATGAAGGAGGCTAAAAAGCTGAAGTGCAAAGCAGAGACAATGGTAGACAAGGCTGGAAAAGCCT
TCAAGTATTTGGAAGCCGTCCTCTCTTTTATCGAGTGTGGAATGGCCTCAGAGTCAGAAAGCTCAGCCAA
GTCGGCGTACGCTGTGTACTCAGAAACCATAGACCTCATTAGGTATGTGATGTCACTAAAATGCTTCTCA
GATAACACGATGCCAGCACAAGAGAAGATATTTGCTGTTTTATGCTTGCGTTGCCAGTCCCTTTTGAACA
TGGCGATGTTTCGATGTAAGAAAGACACAGTGATGAAGTATTCTCGTACTCTCAGTGAACACTTCAAGAG
TACTTCCAAAGTGGCCCAGGCACCTTCTCCATGCACGGCAAGAAGCACAGGCGTTCCGTCCCCCTCTCC
CCAATGCCTTCTCCTGCCAGCTCCGTGGGGTCCCAATCAAGTGCTGGCAGCAGTATGGGGAGCGTCGGGG
TGACGGCCACCGTCAGTACTCCAGTCTCCATCCAGAACATGACCTCCTCCTATGTCACCATCACATCCCA
TGTCCTTACGGCCTTTAGCCTTTGGGAACAGGCCGAGGCCCTCACAAGGAAGAACAAAGAATTCTTCGCT
CAGCTCAGCACAAAAGTGCGTGTGTTGGCCCTCAACAGCAGCCTGGTGGACCTGGTGCACTACACAAGAC
AGGGCCTGCAGCGGCTAAAACAGTCACCCAAAGGCCCCTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001080798

Insert Size: 3681 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_001080798.2, NP_001074267.1

RefSeq Size: 8328 bp

RefSeq ORF: 3681 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]
Transcript Variant: This variant (1) encodes the longer isoform (1).