

Product datasheet for **RG230695**

AFF2 (NM_001169123) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AFF2 (NM_001169123) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	AFF2
Synonyms:	FMR2; FMR2P; FRAXE; MRX2; OX19; XLID109
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG230695 representing NM_001169123 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGATCTATTCGACTTTTTTCAGAGACTGGGACTTGGAGCAGCAGTGTCACTATGAACAAGACCGTAGTG
CACTTAAAAAAGGGAATGGGAGCGGAGGAATCAAGAAGTCCAGCAAGAAGACGATCTCTTTTCTTCAGG
CTTTGATCTTTTGGGGAGCCATACAAGACAAACAAGGTGATGCACTTGCCAACCGAGTCCAGAACACG
CTTGAAACTATGATGAAATGAAGAATTTGCTAACTAACCATTCTAATCAGAATCACCTAGTGGGAATTC
CAAAGAATTCTGTGCCCCAGAATCCAACAACAAAAATGAACCAAGCTTTTTTCCAGAACAAAAGAACAG
AATAATCCACCTCACCAGGATAATACCCATCCTTCAGCACCATGCCTCCACCTTCTGTTGTGATACTG
AATTCAACTCTAATACACAGCAACAGAAAATCAAACCTGAGTGGTCACGTGATAGTCATAACCCTAGCA
CTGTACTGGCAAGCCAGGCCAGTGGTCAGCCAAACAAGATGCAGACTTTGACACAGGACCAGTCTCAAGC
CAAAGTGGAGACTTCTTTGTCTACCCAGCTGAACAGCCCCAGATTGGAGAAGTTGAAGAGTCAAACCCA
TCTGCAAAGGAAGACAGTAACCCTAATTCTAGTGGAGAAGATGCTTTCAAAGAAATCTTTCAATCCAATT
CACCGGAAGAATCTGAATTCGCCGTGAAGCGCCTGGGTCTCCCCTAGTGGCTTCTCTTTATTAGCTCC
TAGCAGTGGCCTTTCAGTTCAAACCTCCCACCAGGGCTTTACTGCAAAAACAAGCATGGGGCAGCAAAAG
CCAAGTGCATACGTGAGCCATGGATGGCCAGGACCAGGACCGGACATCTACCAACACTGAAACCTT
CAATTGAATTTGAGAACAGCTTTGGGAATCTGTCAATTTGGAACACTCTTGATGGAAAACCCAGTGCAGC
CAGTTCAAAGACTAAACTGCCAAAGTTCACCATCCTCCAAACAAGTGAAGTAAGCCTTCCCAGTGATCCA
AGCTGTGTTGAAGAAATCTTGGGGAGATGACCCATTCTGGCCTACTCTCTCACTTCCATGCATACTG
CTGGACACTCTGAGCAGAGCACCTTTTCCATCCCAGGACAGGAATCGCAGCATCTGACCCAGGATTCAC
CTTACAAAAGTGGAAATGACCCAACCACCAGAGCTTCTACAAAGATGCTTGAGGATGACCTGAAGCTGAGC
AGTGATGAAGATGACCTTGAGCCTGTGAAGACCTTGACCACTCAGTGCCTGCACTGAGCTCTACCAGG
CTGTTGAAAAGGCAAAACCTAGGAATAATCCTGTGAACCCACCTTGCCACTCCCAGCCCCACCTGCG
AGTGCAAGCCAGCGGGGTTCTGGCAGCTCCAGCGAATCGGAGAGCAGCTCTGAGTCGGATTTCAGACACT



[View online >](#)

GAAAGTAGCACCCTGACAGCGAATCTAATGAGGCACCTCGTGTGGCAACTCCAGAGCCTGAGCCACCT
 CAACCAACAAGTGGCAACTGGATAAATGGCTTAACAAAGTGACATCCCAGAAAGTCTTTTATTTGTGG
 CCAAAAATGAAACACCCATGGAGACTATTTCTCTGCCTCCTCCAATCATCCAACCAATGGAAGTCCAGATG
 AAAGTGAAGACGAATGCCAGTCAAGTCCCAGCTGAACCCAAAGAAAGGCCTCTCCTCAGTCTATTAGGG
 AGAAAGCCCGTCCACGGCCCACTCAGAAAATCCAGAAACAAAGGCTTTGAAGCATAAGTTGTCAACAAC
 TAGTGAGACAGTGTCTCAAAGGACAATTGGGAAAAACAGCCAAAAAAGTTGAGAAGAACCAGCAGCT
 GACGAGTTTACCTGGCCCAACCAATATTACCAGCAGCACTCCAAAGAAAAAGAAAGTGTGGAGCTTC
 ATGACCCACCAAGAGGCCGCAACAAAGCCACTGCCCAACAAACAGCCCTAGGAAAGAACCAAGACCTAA
 CATCCCTTTGGTCCCGAGAAGAAGAAGTACAGAGGGCCTGGCAAGATTGTGCCAAAGTCTCGGGAATTC
 ATTGAAACAGATTCATCTACATCTGACTCCAACACAGATCAGGAAGAGACCCTGCAAATCAAAGTCTGC
 CTCCTGTCATTATTTCTGGAGGTAATACTGCCAAATCCAAGGAAATCTGTGGTCCAGCCTGACCCTCAG
 CACCTTAATGAGTAGCAGTGGCAGCAACAACAATTATCCATCAGTAATGAAGAGCCAACATTTTCACT
 ATTCCTGTCATGCAAACGAAATCCTGTCCCTCTGCGAGATCATGAGAACCTGAAAACTCTGGGTGA
 AGATTGACCTTGACTTACTCTAGAGTACCTGGCCACAGCTCACTCCATGCAGCACCTGCCAAGCCAGA
 CCACAAGGAGACTGCCACAAAACCAAGCGTCAAGCAGCTGTACAGCTGTGGAGAAACAGCCCTAAG
 GGCAAACGTAAGCACAAGCCAATAGAAGTTGCAGAGAAGATCCCTGAGAAGAAGCAGCGCTGGAGGAGG
 CCACAACATCTGCTTGCTCCCTCCTTGATCTCACCAGCCCCACCCACAAGCCTCCCAACACTAGAGA
 AAATAATTCATCCAGGAGAGCAAATAGAAGAAAGGAAGAAAAACTATTTCTCCTCCACTTTCCCCACTG
 CCAGAGGACCCTCCACGCCGAGAAAATGTCAGTGGCAATAATGGTCCCTTTGGTCAAGACAAAAACATCG
 CCATGACTGGACAAATCATCTACCAACCTAAGAGAAGTGAAGGCAAAATCTGTGCTACTTTCAAAGG
 GATATCGGTAATGAGGGAGACTCCTAAAAAAGGCATCCTCTGCCACCATCACTGTCCCAACTGCT
 ATTGCCACTGCTACTGTCACTGCTACTGCCATTGTCACCACCCTGTACAGCTACTGCCACCGCCACGG
 CCACCACCACAACACTACTACCCTACCATTTCCACCATCACCTCTACCATCACTACTGCCCTCATGGATAG
 CAGTCACCTGGAGATGACGTCTGGGCGGCTCTGCCCTTCTATCCAGCAGCAGCACTAATGTCCGGAGA
 CCCAAGCTCACTTTTGATGACTCGGTTCAATGCTGATTATTACATGCAAGAAGCTAAGAAGCTGAAGC
 ACAAAAGCTGATGCACTGTTGAGAAAATTTGGCAAAGCTGTGAATTATGCTGATGCCGCCCTCTCCTTAC
 TGAATGTGGCAATGCCATGGAACGCGACCCTCTGGAAGCAAAGTCCCATAACCCATGACTCTGAGACT
 GTGGAGCTCCTCAGGTATGCAATGAGGCTGAAGAACTTTGCAAGTCCCTGGCTTCGGATGGGGACAAA
 AGCTAGCAGTACTATGCTACCGATGTTTATCACTCCTCTATTTGAGAATGTTAAGCTGAAGAAGGACCA
 TGCTATGAAGTACTCCAGATCACTGATGGAATATTTAAGCAAATGCTTCAAAGTCCGACAGATACCC
 TCTCCATGGGTAAGCAATGGAAAGAACACTCCATCCCCAGTGTCTCTCAACAACGTCTCCCCATCAACG
 CAATGGGGAAGTGAACAATGGCCAGTACCATTCCCCAGCGCATTACCACATGGCTGCCAGCCACGT
 CAACATCACTAGCAATGTGTTACGGGGTATGAACACTGGGATATGGCCGACAACTGACAAGAGAAAAAC
 AAAGAATCTTTGGTGTCTGGACACGCTGATGGGCTCTGACCCAGCAGCAGCATGACCAATCTTG
 TCCGCTACGTTCCCAAGGACTGTGTTGGCTGCGCATCGATGCCCACTTGTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG230695 representing NM_001169123
 Red=Cloning site Green=Tags(s)

```
MDLFDFFRDWLEQQCHYEQDRSALKKREWERNQEVQVEDDLFSSGFDLFGEPYKTNKGDALANRVQNT
LGNYDEMKNLLTNHSNQNLVGIKNSVPQNPNNKNEPSFFPEQKNRIIPPHQDNTHPSAPMPPPSVVIL
NSTLIHNSNRKSKPEWSRDSHNPSTVLASQASGQPNKMQLTQDQSQAKLEDFVYPAEQPQIGEVESNP
SAKEDSNPNSSGEDAFKEIFQSNSPPESEFAVQAPGSPLVASSLLAPSSGLSVQNFPPGLYCKTSMGQQK
PTAYVRPMDGQDQAPDISPTLKPSIEFENSFGNLSFGTLLDGKPSAASSKTKLPKFITLQTSVSLPSDP
SCVEEILREMTSHWPTPLTSMHTAGHSEQSTFSIPGQESQHLTPGFTLQKWNPTTRASTKMLEDDLKLS
SDEDDLEPVKTLTTQCTATELYQAVEKAKPRNNPVNPPLATPQPPAVQASGGSGSSSESSSESDDST
ESSTTDSSENEAPRVATPEPEPPSTNKWQLDKWLNKVTSONKSFICGQNETPMETISLPPPPIQPMEVQM
KVKTNASQVPAEPKERPLLSLIREKARPRPTQKIPETKALKHKLSTTSETVSQRTIGKKQPKKVEKNTST
DEFTWPKPNITSSTPKEKESVELHDPPRGRNKATAHKPAPRKEPRNIPLAPEKKKYRGPVKIVPKSREF
IETDSSSDSNTDQEETLQIKVLPCCIISGGNTAKSKEICGASLTLSTLMSSSGSNLNSISNEEPTFSP
IPVMQTEILSPLRDHENLKNLWVKIDL DLLSRVPGHSSLLHAAPAKPDHKETATKPKRQTAVTAVEKPAK
GKRKHKPIEVAEKIPEKKQRLEEATTICLLPCCI SPAPPHKPPNTRENNSSRRANRRKEEKLFPPLSPL
PEDPPRRRVSGNNGPFGQDKNIAMTGQITSTKPKRTEGKFCATFKGISVNEGDTPKKASSATITVTNTA
IATATVTATAIVTTTTVTATATATTTTTTTTTITITSTITGLMDSHLEMTSWAALPLLSSSSTNVRR
PKLTFDSSVHNADYYMQEAKLKHKADALFEKFGKAVNYADAALSFTECGNAMERDPLEAKSPYTMSET
VELLRYAMRLKNFASPLASDGDKKLAVALCYRCLSLLYLRMFKLKKDHAMKYSRSLMEYFKQASKVAQIP
SPWVSNKNTSPVSLNNVSPINAMGNCNNGPVTIPQRIHMAASHVNITSNVLRGYEHWDMADKLTREN
KEFFGDLDTLMGPLTQHSMTNLVRYVRQGLCWLRI DAHLL
```

TRTRPLE - GFP Tag - V

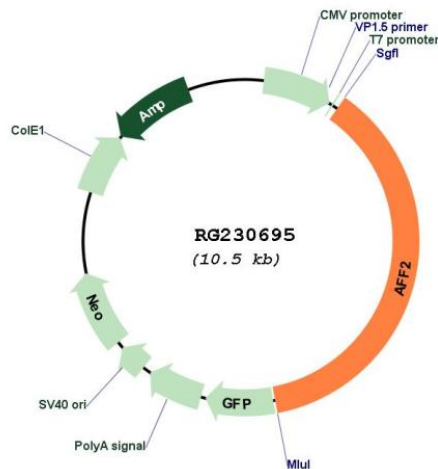
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001169123

ORF Size: 3903 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_001169123.2](#)

RefSeq Size: 13716 bp

RefSeq ORF: 3906 bp

Locus ID: 2334

UniProt ID: [P51816](#)

Cytogenetics: Xq28

Protein Families: Druggable Genome

Gene Summary: This gene encodes a putative transcriptional activator that is a member of the AF4\FMR2 gene family. This gene is associated with the folate-sensitive fragile X E locus on chromosome X. A repeat polymorphism in the fragile X E locus results in silencing of this gene causing Fragile X E syndrome. Fragile X E syndrome is a form of nonsyndromic X-linked cognitive disability. In addition, this gene contains 6-25 GCC repeats that are expanded to >200 repeats in the disease state. Alternate splicing results in multiple transcript variants.[provided by RefSeq, Jul 2016]