

Product datasheet for **RG230692**

AFF2 (NM_001169124) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AFF2 (NM_001169124) 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:	>RG230692 representing NM_001169124 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGATCTATTCGACTTTTTTCAGAGACTGGGACTTGGAGCAGCAGTGTCACTATGAACAAGACCGTAGTG
CACTTAAAAAAGGGAATGGGAGCGGAGGAATCAAGAAGTCCAGCAAGAAGACGATCTCTTTTCTTCAGG
CTTTGATCTTTTGGGGAGCCATACAAGGTAGCTGAATATACAAACAAAGGTGATGCACTTGCCAACCGA
GTCCAGAACACGCTTGGAACTATGATGAAATGAAGAATTTGCTAACTAACCATCTAATCAGAATCACC
TAGTGGGAATTCAAAGAATTCTGTGCCCGAGAATCCCAACAACAAAAATGAACCAAGCTTTTTCCAGA
ACAAAAGAACAGAATAATTCACCTCACCAGGATAATACCATCTTCAGCACCATGCCTCCACCTTCT
GTTGTGATACTGAATCAACTCTAATACACAGCAACAGAAAAATCAAAACCTGAGTGGTCACTGATAGTC
ATAACCTTAGCACTGACTGGCAAGCCAGGCCAGTGGTCAGCCAAACAAGATGCAGACTTTGACACAGGA
CCAGTCTCAAGCCAACTGGAAGACTTCTTTGTCTACCCAGCTGAACAGCCCCAGATTGGAGAAGTTGAA
GAGTCAAACCATCTGCAAAGGAAGACAGTAACCCTAATTCTAGTGGAGAAGATGCTTTCAAAGAAATCT
TTCAATCCAATTCACCGAAGAATCTGAATTCGCCGTGCAAGCGCCTGGGTCTCCCTAGTGGCTTCCTC
TTTATTAGCTCCTAGCAGTGGCCTTTTCAGTTCAAACCTCCCACCAGGGCTTTACTGCAAAACAAGCATG
GGCAGCAAAAGCCAACATGCATACGTGACACCCATGGATGGCCAGGACCGGACATCTCACCA
CACTGAAACCTTCAATTGAATTTGAGAACAGCTTTGGGAATCTGTCAATTTGGAACACTCTTGGATGGAAA
ACCCAGTGCAGCCAGTTCAAAGACTAAACTGCCAAAGTTCACCATCCTCAAACAAGTGAAGTAAGCCTT
CCCAGTGATCCAAGCTGTGTTGAAGAAATCTTGCGGGAATCGCAGCATCTGACCCAGGATTACCTTAC
AAAAGTGGAAATGACCCAACCACCAGAGCTTCTACAAAGATGCTTGAGGATGACCTGAAGCTGAGCAGTGA
TGAAGATGACCTTGAGCCTGTGAAGACCTTGACCACTCAGTGCCTGCCACTGAGCTCTACCAGGCTGTT
GAAAAGGCAAAACCTAGGAATAATCCTGTGAACCCACCCTTGCCACTCCCAGCCCCACCTGCAGTGC
AAGCCAGCGGGGTTCTGGCAGCTCCAGCGAATCGGAGAGCAGCTCTGAGTCGGATTGAGACTGAAAG
TAGCACCCTGACAGCGAATCTAATGAGGCACCTCGTGTGGCACTCCAGAGCCTGAGCCACCCTCAACC



[View online »](#)

AACAAGTGGCAACTGGATAAATGGCTTAACAAAGTGACATCCCAGAACAAGTCTTTTATTTGTGGCCAAA
ATGAAACACCCATGGAGACTATTTCTCTGCCTCCTCCAATCATCCAACCAATGGAAGTCCAGATGAAAGT
GAAGACGAATGCCAGTCAGGTCCCAGCTGAACCCAAAGAAAGGCCTCTCCTCAGTCTCATTAGGGAGAAA
GCCCGTCCACGGCCCACTCAGAAAATCCAGAAAACAAAGGCTTTGAAGCATAAGTTGTCAACAAC TAGT
AGACAGTGTCTCAAAGGACAATTGGGAAAAACAGCCAAAAAAGTTGAGAAGAACCAGCACTGACGA
GTTTACCTGGCCAAACCAATATTACCAGCAGCACTCCCAAAGAAAAAGAAAGTGTGGAGCTTCATGAC
CCACCAAGAGGGCCGCAACAAAGCCACTGCCACAACACAGCCCTAGGAAAGAACCAAGACCTAACATCC
CTTTGGCTCCCGAGAAGAAGAAGTACAGAGGGCCTGGCAAGATTGTGCCAAAGTCTCGGGAATTCATTGA
AACAGATTCATCTACATCTGACTCCAACACAGATCAGGAAGAGACCCTGCAAATCAAAGTCTGCCTCCG
TGCATTATTTCTGGAGGTAATACTGCCAAATCCAAGGAAATCTGTGGTCCAGCCTGACCCTCAGCACCT
TAATGAGTAGCAGTGGCAGCAACAACAATTATCCATCAGTAATGAAGAGCCAACATTTTACCTATTCC
TGTCATGCAAACGAAATCCTGTCCCCTCTGCGAGATCATGAGAACCTGAAAAACCTCTGGGTGAAGATT
GACCTTGACTTACTCTAGAGTACCTGGCCACAGCTCACTCCATGCAGCACCTGCCAAGCCAGACCACA
AGGAGACTGCCACAAAACCAAGCGTCAGACAGCTGTACAGCTGTGGAGAAACCAGCCCTAAGGGCAA
ACGTAAGCACAAGCCAATAGAAGTTGCAGAGAAGATCCCTGAGAAGAAGCAGCGCTGGAGAGGGCCACA
ACTATCTGCTTGCTCCCTCCTTGATCTCACCAGCCCCACCCACAAGCCTCCCAACACTAGAGAAAATA
ATTCATCCAGGAGAGCAAATAGAAGAAAGGAAAGAAAAACTATTTCTCCTCCACTTTCCCACTGCCAGA
GGACCCTCCACGCCGAGAAAATGTCAGTGGCAATAATGGTCCCTTTGGTCAAGACAAAAACATCGCCATG
ACTGGACAAATCACATCTACAAACCTAAGAGAAGTGAAGGCAAAATCTGTGCTACTTTCAAAGGGATAT
CGGTAATGAGGGAGACTCCAAAAAGGCATCCTCTGCCACCATCACTGTCCCAACTGCTATTGCT
CACTGCTACTGTCACTGCTACTGCCATTGTCACCACCCTGTACAGCTACTGCCACCGCCACGGCCACC
ACCACAACACTACCCTACCATTTCCACCATCACCTTACCATCACTACTGGCCTCATGGATAGCAGTC
ACCTGGAGATGACGTCTGGGCGGCTCTGCCCTTCTATCCAGCAGCAGCACTAATGTCCGGAGACCCAA
GCTCACTTTTGATGACTCGGTTACAATGCTGATTATTACATGCAAGAAGCTAAGAAGCTGAAGCACAAA
GCTGATGCACTGTTGAGAAATTTGGCAAAGCTGTGAATTATGCTGATGCCGCCCTCTCCTTCACTGAAT
GTGGCAATGCCATGGAACGCGACCCTCTGGAAGCAAAGTCCCATACACCATGACTCTGAGACTGTGGA
GCTCCTCAGGTATGCAATGAGGCTGAAGAACTTTGCAAGTCCCTTGGCTTCGGATGGGGACAAAAAGCTA
GCAGTACTATGCTACCGATGTTTATCACTCCTCTATTTGAGAATGTTAAGCTGAAGAAGGACCATGCTA
TGAAGTACTCCAGATCACTGATGGAATATTTAAGCAAATGCTTCAAAGTCCGACAGATACCCTCTCC
ATGGGTAAGCAATGGAAGAACAACCTCCATCCCCAGTGTCTCTCAACAACGTCTCCCCATCAACGCAATG
GGAACTGTAACAATGGCCAGTCACCATCCCCAGCGCATTACCACATGGCTGCCAGCCACGTCAACA
TCACTAGCAATGTGTTACGGGGCTATGAACACTGGGATATGGCCGACAACTGACAAGAGAAAAACAAGA
ATTTCTTTGGTGTCTGGACACGCTGATGGGCTCTGACCCAGCACAGCAGCATGACCAATCTTGTCCG
TACGTTCCCAAGGACTGTGTTGGCTGCGCATCGATGCCCACTTGTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG230692 representing NM_001169124
 Red=Cloning site Green=Tags(s)

MDLFDFFRDWLEQQCHYEQDRSALKKREWERRNQEVEQEDDLFSSGFDLFGEPYKVAEYTNKGDALANR
 VQNTLGNYDEMNLLTNHNSQNHLVGIPKNSVPQNPNKNEPFFPEQKNRIIPPHQDNTHPSAMPPPS
 VVILNSTLIHSNRKSKPEWSRDSHPSTVLASQASGQPNKMOTLTQDQSQAKLEDFVYPAEQPQIGEVE
 ESNPSAKEDSNPNSGGEDAFKEIFQSNPEESEFAVQAPGSPLVASSLLAPSSGLSVQNFPPGLYCKTSM
 GQQKPTAYVRPMDGQDQAPDISPTLKPSIEFENSFGNLSFGTLLDGKPSAASSKTKLPKFTILQTSEVSL
 PSDPSCVEEILRESQHLTPGFTLQKWNDPTTRASTKMLEDLKLSSDEDDLEPVKLTQTCTATELYQAV
 EKAKPRNPVNPPLATPQPPAVQASGSGSSSESSSESDDTESSTTDESNEAPRVATPEPEPPST
 NKWQLDKWLNVTSQNKSFICGQNETPMETISLPPPIIQPMEVQMKVKTNASQVPAEPKERPLLSLIREK
 ARPRPTQKIPETKALKHKLSTTSETVSQRTIGKKQPKKVEKNTSTDEFTWPKNITSSTPKEKESVELHD
 PPRGRNKATAHKPAPRKEPRNIPLAPEKPKYRGPVKIVPKSREFIETDSSTSDSNTDQEETLQIKVLP
 CIISSGNTAKSKEICGASLTLSTLSSSGSNNLSISNEEPTFSPIPVMQTEILSPLRDHENLKNLVVWI
 DLDLLSRVPGHSSLHAAPAKPDHKETATPKRQTAVTAVEKPAPKGRKHKPIEVAEKIPEKKQRLEEAT
 TICLLPPCISPAPPHKPPNTRENNSSRRANRRKEKLFPPPLSPLPEDPPRRRNVSNGNGPFGQDKNIAM
 TGQITSTPKRTEGKFCATFKGISVNEGDTPKKASSATITVTNTAIATATVTATAIVTTTATATATAT
 TTTTTTITSTITSTITGLMSSHLEMTSWAALPLLSSSSTNVRPKLTFDDSVHNADYYMQEAKKLKHK
 ADALFEKFGKAVNYADAALSFTECGNAMERDPLEAKSPYTMSETVELLRYAMRLKNFASPLASDGDKL
 AVL CYRCLSLLYLRMFKLKKDHAMKYSRSLMEYFKQASKVAQIPSPWVSNKNTSPVSLNNVSPINAM
 GNCNNGPVTIPQRIHHMAASHVNITSNVLRYEHWDMADKL TRENKEFFGDLDTLMGPLTQHSSMTNLVR
 YVRQGLCWLRI DAHLL

TRTRPLE - GFP Tag - V

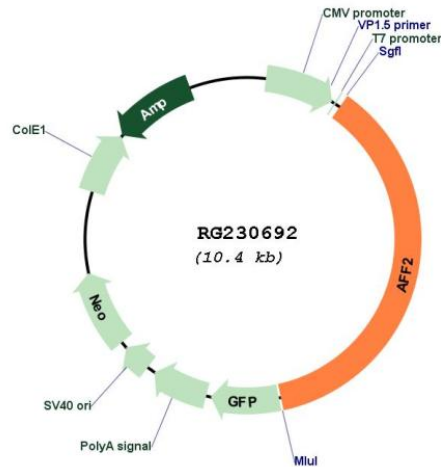
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001169124

ORF Size: 3828 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_001169124.2](#)

RefSeq Size: 13641 bp

RefSeq ORF: 3831 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]