

Product datasheet for **RG230688**

AFF2 (NM_001169125) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AFF2 (NM_001169125) 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:	>RG230688 representing NM_001169125 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGATCTATTCGACTTTTTTCAGAGACTGGGACTTGGAGCAGCAGTGTCACTATGAACAAGACCGTAGTG
CACTTAAAAAAGGGAATGGGAGCGGAGGAATCAAGAAGTCCAGCAAGAAGACGATCTCTTTTCTTCAGG
CTTTGATCTTTTGGGGAGCCATACAAGACAAACAAGGTGATGCACTTGCCAACCGAGTCCAGAACACG
CTTGAAACTATGATGAAATGAAGAATTTGCTAACTAACCATTCTAATCAGAATCACCTAGTGGGAATTC
CAAAGAATTCTGTGCCCCAGAATCCAACAACAAAATGAACCAAGCTTTTTTCCAGAACAAAAGAACAG
AATAATCCACCTCACCAGGATAATACCCATCCTTCAGCACCATGCCTCCACCTTCTGTTGTGACTG
AATTCACTCTAATACACAGCAACAGAAAATCAAACCTGAGTGGTCACGTGATAGTCATAACCCCTAGCA
CTGTACTGGCAAGCCAGGCCAGTGGTCAGCCTCAACAGATGCAGACTTTGACACAGGACCAGTCTCAAGC
CAAAGTGGAGACTTCTTTGTCTACCCAGCTGAACAGCCCCAGATTGGAGAAGTTGAAGAGTCAAACCCA
TCTGCAAAGGAAGACAGTAACCCTAATTCTAGTGGAGAAGATGCTTTCAAAGAAATCTTTCAATCCAATT
CACCGGAAGAATCTGAATTCGCCGTGAAGCGCCTGGGTCTCCCCTAGTGGCTTCTCTTTATTAGCTCC
TAGCAGTGGCCTTTCAGTTCAAACCTCCCACCCAGGGCTTTACTGCAAAAACAGCATGGGGCAGCAAAAG
CCAACCTGCATACGTGAGCCATGGATGGCCAGGACCAGGACCCGACATCTACCAACACTGAAACCTT
CAATTGAATTTGAGAACAGCTTTGGGAATCTGTCAATTTGGAACACTCTTGATGGAAAACCCAGTGCAGC
CAGTTCAAAGACTAAACTGCCAAAGTTCACCATCCTCAAACAAGTGAAGTAAGCCTTCCAGTGTCCCA
AGCTGTGTGAAGAAATCTTGGCGGAATCGCAGCATCTGACCCAGGATTCACCTTACAAAAGTGGAAATG
ACCCAACCACCAGAGCTTCTACAAAGATGCTTGAGGATGACCTGAAGCTGAGCAGTGTGAAGATGACCT
TGAGCCTGTGAAGACCTTGACCACTCAGTGCCTGACCTGAGCTCTACCAGGCTGTTGAAAAGGCAAAA
CCTAGGAATAATCCTGTGAACCCACCTTGGCCACTCCCCAGCCCCACCTGCAGTGAAGCCAGCGGGG
GTTCTGGCAGCTCCAGCGAATCGGAGAGCAGCTCTGAGTCGGATTGAGACTGAAAGTAGCACCCTGA
CAGCGAATCTAATGAGGCACCTCGTGTGCAACTCCAGAGCCTGAGCCACCTCAACCAACAAGTGGCAA



[View online >](#)

CTGGATAAATGGCTTAACAAAGTGACATCCCAGAACAAGTCTTTTATTTGTGGCCAAAATGAAACACCCA
TGGAGACTATTTCTCTGCCTCCTCCAATCATCCAACCAATGGAAGTCCAGATGAAAGTGAAGACGAATGC
CAGTCAGGTCCCAGCTGAACCCAAAGAAAGGCCTCCTCAGTCTCATTAGGGAGAAAGCCCGTCCACGG
CCCCTCAGAAAATCCAGAAACAAAGGCTTTGAAGCATAAGTTGTCAACAACACTAGTGAGACAGTGTCTC
AAAGGACAATTGGGAAAAACAGCCAAAAAAGTTGAGAAGAACCAGCACTGACGAGTTTACCTGGCC
CAAACCAATATTACCAGCAGCACTCCCAAGAAAAAGAAAGTGTGGAGCTTCATGACCCACCAAGAGGC
CGCAACAAAGCCACTGCCACAAACCAGCCCCTAGGAAAGAACCAAGACCTAACATCCCTTTGGCTCCCG
AGAAGAAGAAGTACAGAGGGCTGGCAAGATTGTGCCAAAGTCTCGGGAATTCATTGAAACAGATTCATC
TACATCTGACTCCAACACAGATCAGGAAGAGACCTGCAAAATCAAAGTCTGCCTCCGTGCATTATTTCT
GGAGGTAATACTGCCAAATCCAAGGAAATCTGTGGTGCCAGCCTGACCCTCAGCACCTTAATGAGTAGCA
GTGGCAGCAACAACAACCTATCCATCAGTAATGAAGAGCCAACATTTTACCTATTCTGTGCATGCAAAAC
TGAAATCTGTCCCTCTGCGAGATCATGAGAACCTGAAAAACCTCTGGGTGAAGATTGACCTTGACTTA
CTCTCTAGAGTACCTGGCCACAGCTCACTCCATGCAGCACCTGCCAAGCCAGACCACAAGGAGACTGCCA
CAAACCCAAAGCGTCAGACAGCTGTACAGCTGTGGAGAAACCAGCCCCTAAGGGCAAACGTAAGCACAA
GCCAATAGAAGTTGCAGAGAAGTCCCTGAGAAGAAGCAGCGCCTGGAGGAGGCCACAACATCTGCTTG
CTCCCTCCTTGATCTCACCAGCCCACCCACAAAGCCTCCCAACACTAGAGAAAATAATTCATCCAGGA
GAGCAATAGAAGAAAGGAAAGAAAACTATTTCTCCTCCACTTTCCCCACTGCCAGAGGACCCTCCACG
CCGAGAAATGTCAAGTGGCAATAATGGTCCCTTTGGTCAAGACAAAAACATCGCCATGACTGGACAAATC
ACATCTACCAAACCTAAGAGAAGTGAAGGCAAATCTGTGCTACTTTCAAAGGATATCGGTAATGAGG
GAGACTCCAAAAAGGCATCCTCTGCCACCATCACTGTCAACCAACTGCTATTGCCACTGCTACTGT
CACTGCTACTGCCATTGTCAACCACTGTACAGCTACTGCCACCGCCACGGCCACCACCACAACACTACT
ACCACTACCATTTCCACCATCACCTCTACCATCACTACTGGCCTCATGGATAGCAGTCACTGGAGATGA
CGTCTGGGCGGCTCTGCCCTTCTATCCAGCAGCAGCACTAATGTCCGGAGACCAAGCTCACTTTTGA
TGAATCGGTTACAATGCTGATTATTACATGCAAGAAGCTAAGAAGCTGAAGCACAAAGCTGATGCACTG
TTCGAGAAATTTGGCAAAGCTGTGAATTATGCTGATGCCGCCCTCTCCTCACTGAATGTGGCAATGCCA
TGGAACGCGACCTCTGGAAGCAAAGTCCCATACACCATGACTCTGAGACTGTGGAGCTCCTCAGGTA
TGCAATGAGGCTGAAGAAGTTCGCAAGTCCCTGGCTTCCGATGGGGACAAAAAGCTAGCAGTACTATGC
TACCGATGTTTACTCCTCTATTTGAGAATGTTTAAGCTGAAGAAGGACCATGCTATGAAGTACTCCA
GATCACTGATGGAATATTTAAGCAAAATGCTTCAAAGTCCGACAGATACCCTCTCCATGGGTAAGCAA
TGGAAAGAACAACCTCCATCCCAGTGTCTCTCAACAACGTCTCCCCATCAACGCAATGGGAACTGTAAC
AATGGCCAGTCAACATCCCAGCGCATTCAACCATGGCTGCCAGCCAGTCAACATCACTAGCAATG
TGTTACGGGGCTATGAACACTGGGATATGGCCGACAACTGACAAGAGAAAAACAAGAATCTTTGGTGA
TCTGGACAGCTGATGGGCTCTGACCCAGCACAGCAGCATGACCAATCTTGTCCGCTACGTTCCGCAA
GGACTGTGTTGGCTGCGCATCGATGCCACTTGTTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTAA

Protein Sequence: >RG230688 representing NM_001169125
 Red=Cloning site Green=Tags(s)

```
MDLFDFFRDWLEQQCHYEQDRSALKKREWERNQEVQQEDDLFSSGFDLFGEPYKTNKGDALANRVQNT
LGNYDEMNKLLTNHSNQNLVGIKNSVPQNPNNKNEPFFPEQKNRIIPPHQDNTHPSAPMPPPSVVIL
NSTLIHSNRKSKPEWSRDSHNPSTVLASQASGQPNKMQLTQDQSQAKLEDFFVYPAEQPIGEVEESNP
SAKEDSNPNSSGEDAFKEIFQSNPSEEFVQAPGSPLVASSLLAPSSGLSVQNFPPGLYCKTSMGQQK
PTAYVRPMDGQDQAPDISPTLKPSIEFENSFGNLSFGTLLDGKPSAASSKTKLPKFILQTSVSLPSDP
SCVEEILRESQHLTPGFTLQKWNPTTRASTKMLEDDLKLSDEDDLEPVKTLTTQCTATELYQAVEKAK
PRNNPVPNPLATPQPPAVQASGGSGSSSESSSESDDTESSTTDESNEAPRVATPEPEPPSTNKWQ
LDKWLNKVTSQNKSFICGQNETPMETISLPPPIIQPMEVQMKVKTNASQVPAEPKERPLLSIREKARPR
PTQKIPETKALKHKLSTTSETVSQRTIGKKQPKKVEKNTSTDEFTWPKPNITSSTPKEKESVELHDPGRG
RNKATAHKAAPRKEPRNIPLAPEKKKYRGGKIVPKSREFIETDSDSDSNTDQEEETLQIKVLPCCIIS
GGNTAKSKEICGASLTLSTLMSSSGSNNLSISNEEPTFSPIVMQTEILSPLRDHENLKNLWVKIDLDL
LSRVPGHSSLHAAPAKPDHKETATPKRQTAVTAVEKPAPKGRKHKPIEVAEKIPEKKQRLEEATTICL
LPPCISPAPPHKPPNTRENNSSRRANRRKEEKLFPPLSPLPEDPPRRRNVSNGNPGFGQDKNIAMTGQI
TSTKPKRTEGKFCATFKGISVNEGDTPKKASSATITVTNTAIATATVTATAIVTTTATATATATTTTT
TTTTISTITSTITGLMDSHLEMTSWAALPLSSSSTNVRRPKLTFDDSVHNADYYMQEAKLKHKADAL
FEKFGKAVNYADAALSFTECGNAMERDPLEAKSPYTMSETVELLRYAMRLKNFASPLASDGDKLAVLC
YRCLSLLYLRFMKLKKDHAMKYSRSLMEYFKQASKVAQIPSPWVSNKNTPSPVSLNNVSPINAMGNCN
NGPVTIPQRIHMAASHVNITSNVLRGYEHWDMAKLTRENKEFFGDLDTLMGPLTQHSSMTNLVRYVRQ
GLCWLRI DAHLL
```

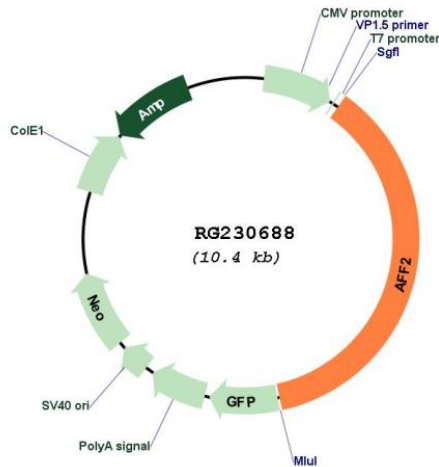
TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001169125

ORF Size: 3816 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_001169125.2](#)

RefSeq Size: 13629 bp

RefSeq ORF: 3819 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]