

Product datasheet for **SC125530**

AFF2 (NM_002025) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AFF2 (NM_002025) Human Untagged Clone
Tag:	Tag Free
Symbol:	AFF2
Synonyms:	FMR2; FMR2P; FRAXE; MRX2; OX19; XLID109
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_002025, the custom clone sequence may differ by one or more nucleotides

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ATGGATCTATTCGACTTTTTTCAGAGACTGGGACTTGGAGCAGCAGTGTCCTATGAACAAGACCGTAGTG
CACTTAAAAAAGGGAATGGGAGCGGAGGAATCAAGAAGTCCAGCAAGAAGACGATCTCTTTTCTTCAGG
CTTTGATCTTTTTGGGGAGCCATACAAGGTAGCTGAATATACAAACAAAGGTGATGCACTTGCCAACCGA
GTCCAGAACACGCTTGGAACTATGATGAAATGAAGAATTTGCTAACTAACCTTCTAATCAGAATCACC
TAGTGGGAATCCAAAGAATTCTGTGCCCCAGAATCCCAACAACAAAAATGAACCAAGCTTTTTTCCAGA
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GTTGTGATACTGAATTCAACTCTAATACACAGCAACAGAAAATCAAACCTGAGTGGTCAGTGATAGTC
ATAACCCTAGCACTGACTGGCAAGCCAGGCCAGTGGTCAAGCAACAAGATGCAGACTTTGACACAGGA
CCAGTCTCAAGCCAACTGGAAGACTTCTTTGTCTACCCAGCTGAACAGCCCCAGATTGGAGAAGTTGAA
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TTCAATCCAATTCACCGAAGAACTGAAATTCGCCGTGCAAGCGCCTGGGTCTCCCTAGTGGCTTCCTC
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GGGCAGCAAAAGCCAACATGCATACGTGAGACCCATGGATGGCCAGGACCAGGCACCGGACATCTACCAA
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CCATGCATACTGTGGACTCTGAGCAGAGCACCTTTTCCATCCAGGACAGGAATCGCAGCATCTGAC
CCCAGGATTCACCTTACAAAAGTGAATGACCCAAACCACAGAGCTTCTACAAAAGTCAAGTGTCTTTCAA
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ACCCTTGGCCACTCCCCAGCCCCACCTGCAGTGAAGCCAGCGGGGTTCTGGCAGCTCCAGCGAATCG
GAGAGCAGCTCTGAGTCGATTGAGACTGAAAGTAGCACCCTGACAGCGAATCTAATGAGGCACCTC
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GACATCCCAGAACAAGTCTTTTATTTGTGGCCAAAATGAAACACCCATGGAGACTATTTCTCTGCCTCCT
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 AAGTCCCATACACCATGTACTCTGAGACTGTGGAGCTCCTCAGGTATGCAATGAGGCTGAAGAATTTG
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 CAAAATGCTTCAAAGTCGCACAGATACCCTCTCCATGGTAAGCAATGGAAAGAACACTCCATCCCCAG
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 GCGATTCAACCATGGCTGCCAGCCAGTCAACATCACTAGCAATGTGTTACGGGGCTATGAACACTGG
 GATATGGCCGACAACTGACAAGAGAAAACAAAGAATTCTTTGGTGATCTGGACACGCTGATGGGGCCTC
 TGACCCAGCACAGCAGCATGACCAATCTTGTCCGCTACGTTCCCAAGGACTGTGTTGGCTGCGCATCGA
 TGCCCACTTGTGTAG

**5' Read Nucleotide
 Sequence:**

>OriGene 5' read for NM_002025 unedited
 ATAGGGCGGCCGGAATTCGGCACGAGGCCGGAGCACAGGACCAGACACCTCCAGCGCCC
 GCTGCTGCTGCCGATGCGGCCCGGACACTTTTAGCTGGGCGGGAGGGCTGGAGAGCCGGG
 GGCCGCCGAGAACCGCCAGCGAGCTGTGCCGAGAGCCGCGCCGACCCGCTGCGATCAGGG
 ACAGGGCGCCCGCCGCCCGCCGCTGGCCGCTATGGATCTATTCGACTTTTTTCAGAGA
 CTGGGACTTTGGAGCAGCAGTGTCACTATGAACAAGACCGTAGTGCATTAATAAAGGGA
 ATGGGAGCGGAGGAATCAAGAAGTCCAGCAAGAAGACGATCTCTTTTCTCAGGCTTTGA
 TCTTTTTGGGGAGCCATACAAGACAAACAAAGGTGATGCACTTGCCAACCGAGTCCAGAA
 CACGCTTGGAACTATGATGAAATGAAGAATTTGCTAACTAACCATTTCTAATCAGAAATCA
 CCTAGTGGGAATTCCAAAGAATTTCTGTGCCCAAAAATCCACAACCACAATGGACCCA
 GCCTTTTTTCCGNACCAAAGGAACCGGATTAATTTCCACCTACCAAGGAATAATACCCT
 ATCCTTTAGCCACAAATGGCCTCCACCTTTCTGTGGAGAAAACGGAATTCACCTTAATA
 CCCCGCACCGAATAATCCAAAACCGGAGG

3' Read Nucleotide Sequence:	>OriGene 3' read for NM_002025 unedited GGAGAGCACTGGGGAGGGGTCACAGGGATGCCACCCGGGATCTGTTTCAGGAAACAGCTAT GACCGCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTCCAAGTGCATATCTAT TATTTATCTGGTCATAACTCAGTGAACAGAATTTGATAACCCAGCATATTAAGGCTACA TGGAAATATATACCAGCAGGTAATTACCAGTAAGTAATGCATGGATAGTGTTCACCCAA GTGTAAGAATCTTCTGGTGAGCTGGAACATCAAAAATGATATTTACATTGTGATGTTAG GGACATAAAAATGAATGTGAAGGATCATAAGGGGGTAGTCACAACCAGTGAGAAAATGTCTC CAAATTAGGTGAATGGTTCCAATGTTTAGGGCTTTTCAAAGCATCTCAAGGTGAAGCA CTACCCACGACTCATTTAAAAAATAAAAGTTAGCTACTATTTAGAAAAGTTGGAGTT TTCTTAAAAATTTTCATGGAAATGATTCACAATAAAATGGGCCTTTAATAAAAAGGAGTA ATTTGGATTTCTTCAAAGTTTATTGGGCCAACNCAAGGGAAAGGAAACACCCGTTTG AAAAAAGGTTGAAAACCACAAAACTTTTTAGAAAGAAAAATGTGAATAA TATTTGGAAGAATTCAGAATTCAGGCCCN
Restriction Sites:	NotI-NotI
ACCN:	NM_002025
Insert Size:	5500 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:	<ol style="list-style-type: none"> 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:	<u>NM_002025.1</u> , <u>NP_002016.1</u>
RefSeq Size:	13695 bp
RefSeq ORF:	3936 bp
Locus ID:	2334
UniProt ID:	<u>P51816</u>
Cytogenetics:	Xq28
Domains:	AF-4
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]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.