

Product datasheet for **SC315786**

FTO (NM_001080432) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: FTO (NM_001080432) Human Untagged Clone
Tag: Tag Free
Symbol: FTO
Synonyms: ALKBH9; BMIQ14; GDFD
Mammalian Cell Selection: None
Vector: [pCMV6-XL5](#)
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_001080432 edited
GGCAGCATGAAGCGCACCCCGACTGCCGAGGAACGAGAGCGCGAAGCTAAGAAACTGAGG
CTTCTTGAAGAGCTTGAAGACACTTGGCTCCCTTATCTGACCCCAAAGATGATGAATTC
TATCAGCAGTGGCAGCTGAAATATCCTAAACTAATTCTCCGAGAAGCCAGCAGTGTATCT
GAGGAGCTCCATAAAGAGGTTCAAGAAGCCTTTCTCACACTGCACAAGCATGGCTGCTTA
TTTCGGGACCTGGTTAGGATCCAAGGCAAAGATCTGCTCACTCCGGTATCTCGCATCCTC
ATTGGTAATCCAGGCTGCACCTACAAGTACCTGAACACCAGGCTCTTTACGGTCCCCTGG
CCAGTGAAGGGTCTAATATAAAACACACCCGAGGCTGAAATAGCCGCTGCTTGTGAGACC
TTCCTCAAGCTCAATGACTACCTGCAGATAGAAACCATCCAGGCTTTGGAAGAATTGCT
GCCAAAGAGAAGGCTAATGAGGATGCTGTGCCATTGTGTATGTCTGCAGATTTCCCAGG
GTTGGGATGGGTTTCATCCTACAACGGACAAGATGAAGTGGACATTAAGAGCAGAGCAGCA
TACAACGTAACCTTGGCTGAATTTTCATGGATCCTCAGAAAATGCCATACCTGAAAGAGGAA
CCTTATTTTGGCATGGGAAAATGGCAGTGAAGTGGCATCATGATGAAAATCTGGTGGAC
AGGTCAAGCGGTGGCAGTGTACAGTTATAGCTGTGAAGGCCTGAAGAGGAAAAGTGAAGAT
GACTCTCATCTCGAAGGCAGGGATCCTGATATTTGGCATGTTGGTTTTAAGATCTCATGG
GACATAGAGACACCTGGTTTGGCGATACCCCTTCCCAAGGAGACTGCTATTTTCATGCTT
GATGATCTCAATGCCACCACCAACTGTGTTTTGGCCGGTTTCAACCTCGGTTTAGT
TCCACCACCGAGTGGCAGAGTGTCAACAGGAACCTTGGATTATATTTTACAACGCTGT
CAGTTGGCTCTGCAGAATGTCTGTGACGATGTGGACAATGATGATGCTCTTTGAAATCC
TTTGAGCCTGCAGTTTTGAAACAAGGAGAAGAAATTCATAATGAGTTCGAGTTTGAAGTGG
CTGAGGCAAGTTTTGGTTTCAAGGCAATCGATACAGAAAAGTGCACACTGACTGGTGGTGTCAA
CCCATGGCTCAACTGGAAGCACTGTGGAAGAAGATGGAGGGTGTGACAAATGCTGTGCTT
CATGAAGTTAAAAGAGAGGGGCTCCCCGTGGAACAAAGGAATGAAATCTTGACTGCCATC
CTTGCCTCGCTCACTGCACGCCAGAACCAGGAGAGAATGGCATGCCAGGTGCCAGTCA
CGAATTGCCCGAACATTACCTGCTGATCAGAAGCCAGAATGTCCGCCATACTGGGAAAAG
GATGATGCTTCGATGCCTCTGCCGTTTGACCTCACAGACATCGTTTCAGAACTCAGAGGT
CAGCTTCTGGAAGCAAAACCCTAGAAGGAGCACAAGTCTCAGGCCGAGGAGAAAAAGAGA



[View online »](#)

TCGGCTTTTCTCCTCCAACGTTGTCATGGGCTTAAGCAAGAGCAGTGGAGACTTCTCTTG
 GCCCTAGATTGTAGCACCCGGTCCCAATCCAAAACAGCTAGGAAATGGTGCCCATGAA
 GTTTTAAATGTTTTAAATGACCCTGTGTATAGTCTGATTTGGTGTTAAACAGGACCTT
 CTTCCCCAAAATTGTTCCAGATTATAAAATGTGAGCCATTAGCCCCCAAGTCCAGGGC
 AGGCGACAGGAACGAGCCAGCGTGTGACAAAGCCTAACCTACTTTCTCTTTCCAAGC
 TTTTTCAGAGACTCTGGAGTGGACCCAGCCCTCTGGGAAAGACAGAACTTAGAGACATC
 CCAGTTACTCACCACCCATAGTGTCTCAATATGGTAGCCACTAGCTAGCTGTGGCT
 ACTTCAATTTAAATTCAGTTTTAATTTTAAATTAATAAATGCAGCTTTCAGTCGCCCTGGC
 CACATTTCAAGTGCTTAACAGCCTCATGTGGCTAGTGACTGCTGTATTGGACGGTACAGA
 TATGGAACATTTTCATCATCGAAGAAAGTCTATTGGACAACACTTCTATAAAAAAGTTTG
 AGAGCAGGAATTCTCATTCCATTCGTCTGTAGCTTCTATCCCCAAAGGCAAAGAACTA
 AAAGAGAAATGACTCATTGAAGATTGGCCTCTTCTCTTCTCTAAGACAAACCTAAGTAA
 AAGCTGAGCTTTGAGTCTATGCTCAGCACACGGGAAGGAGATGTTAATAATTAATAA
 AAGTTGATATCCTGTCTTAGGGAGTCCCTTGATCTCTTGAAAGAGACACAGCCCCATT
 TACATTATTTCTGGATTTCACCAGCATAGTATAGTTTTTTTTCTGTAAGTCCCTCATTCT
 TATGTAATAACAGGTGGAAGTGGGTTTGAAGAACCTCAGTGGCCCATCCTGATGACATT
 GGAGACTCAAAGAGACAAGAGAGAGTAGGGTTTAAAACCTGAGCTTTAAGACTCCCCTA
 GCTTCGTGTCTTTGGCATGTTAACGTGCCTCAGTTTCTCATCTGTATAATGGGGATAT
 ATGAAAGGCACCAGTCTAAGGTGAACATTAAGTGAGATGATTCTAGTTACAGACTTAGA
 ACAATTTCCAGCACATAGTTAAATATCCAGGAAATCTGGTACTGTTATGTGTGGGTGAG
 CTGACCTGGATGATAGATGTTTTCTCTCTCTTGTGACCCCTCCGCCAGTTTTGTCTTGT
 GATGCCATTAACACATCTCTCCCTTTCTGACCTGGCTCCTGCCATTGGTGTCCCAAGAA
 ATCGTGAGAATAGTTAGCCCCCGTCTCCCAGCCTGTTGCTTTCTCGTGTAGTTGTTCA
 CAGTAGTTGAGAAGTTGAAGAGCTTTTGCCTATTGAAGGTGCACTGAGAATAAACTCTTT
 CCTGCCACCAGAATTGCAGTGGTTCACGGCCTGCACTATTCCCATGAATGCAGTTAATA
 GCCACAGAAATGTCACATTAAGCAAAGCAGCCAGGGTCTCATCGTGTGAGACTCGAGTC
 TCTCAGACCTGGATTCAATCCCTGGTGTCTTTGAGCCTCAGTTTCTCATTGGTAAAAG
 AGAAGTGAAGCAGTGTCTCACAGGGTATTACAGAGATTAATGAAATAAATGAAATAAC
 ATAGACCAGGAGGGCGTGGTGTAAAAGTACAGATGGGGCACCCCTCGGGCCATCCAGC
 CCAGTGTCTTTAGCCCTATGATGTTCAATTTTTTGTATATCCCATAGGTGCCCAT
 ATTTAAAAATGGGAGATTTACATAAAATTAAGGTCTGCATTTTCTTTTTCTTTTCT
 TTTTTTTTTTTTTTTGAGACACAGTCTCACTCTGTCCACCAGGCTAGAGTGCAGTGGCAGG
 ATCTCAGCTCACTGCAACCTCTGCCTCCCAGGTTCAAGTAATTCTCCTGCCTCAGCCTCC
 CAAGTAGCTGGGACTACAGGCAGTGCACCACGCCAGCTAATTTTTGTATTTTAGCA
 GAGATGGGGTTTACCACATTGGCCAGGATGATCTCGATCTCAACCTCGTATCCACCCA
 CCTCGTCTCCCAAAGCGCTGGGATTACAGGCGTGAGCCACCGCCCAAGCCAAGGTCTG
 CATTTTTCTTTAGAACTCAGAACACCCAATAGTCTAGGCCCCATCCTCGCATGGCAGC
 AAGCTAAATAAGCATCTCCCACTGCGAGTTGGGGCATGACCCAGCCTATGGTTTGCAT
 ACTCCCTCTTTTCTCCGTTTTTTTCATTAATTGTGAACCTGACCTGCATCACCTTTTCAT
 GTCAGTGTCTCCAAACCTGCTTGCTTGACCCCTCTAGTCGAAATATTTTGTGCTTACC
 CCAATATATGTGTGACTATTGAACTCTATTCGTAGACTGCTTGTACTAATGTCAATTTG
 CATCATAAAATATTCATATCCAATAAACATATTAAGGATGAGATAAGAAAAAAAAAAAA
 AAAAAA

Restriction Sites: Please inquire
ACCN: NM_001080432
Insert Size: 4100 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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_001080432.1</u> , <u>NP_001073901.1</u>
RefSeq Size:	4294 bp
RefSeq ORF:	1518 bp
Locus ID:	79068
UniProt ID:	<u>Q9C0B1</u>
Cytogenetics:	16q12.2
Gene Summary:	This gene is a nuclear protein of the AlkB related non-haem iron and 2-oxoglutarate-dependent oxygenase superfamily but the exact physiological function of this gene is not known. Other non-heme iron enzymes function to reverse alkylated DNA and RNA damage by oxidative demethylation. Studies in mice and humans indicate a role in nervous and cardiovascular systems and a strong association with body mass index, obesity risk, and type 2 diabetes. [provided by RefSeq, Jul 2011]