

Product datasheet for **KN423780**

FADS2 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 linear donor
Donor DNA:	EF1a-GFP-P2A-Puro
Symbol:	FADS2
Locus ID:	9415
Components:	<p>KN423780G1, FADS2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCCTGGAGAAGTGGAGTCTG</p> <p>KN423780G2, FADS2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GATTGGGTGTCCTGCGGATG</p> <p>KN423780D, Linear donor DNA containing LoxP-EF1A-tGFP-P2A-Puro-LoxP: The sequence below is cassette sequence only. The linear donor DNA also contains proprietary target sequence.</p>

LoxP-EF1A-tGFP-P2A-Puro-LoxP (2739 bp)

ATAACTTCGT ATAATGTATG CTATACGAAG TTATCGTGAG GCTCCGGTGC CCGTCAGTGG GCAGAGCGCA
 CATCGCCAC AGTCCCCGAG AAGTTGGGGG GAGGGTTCGG CAATTGAACC GGTGCCTAGA GAAGGTGGCG
 CGGGGTAAAC TGGGAAAGTG ATGTCGTGTA CTGGCTCCGC CTTTTCCCG AGGGTGGGGG AGAACCCTAT
 ATAAGTGAC TAGTCGCCGT GAACGTTCTT TTTCCGAACG GGTTCGCCGC CAGAACACAG GTAAGTGCCG
 TGTGTGGTTC CCGCGGGCCT GGCCTCTTTA CGGGTTATGG CCCTTGCGTG CCTTGAATTA CTCCACCTG
 GCTGCAGTAC GTGATTCTTG ATCCCAGCT TCGGGTTGGA AGTGGGTGGG AGAGTTCGAG GCCTTGCGCT
 TAAGGAGCCC CTCGCCTCG TGCTTGAGTT GAGGCCTGGC CTGGGGCTG GGGCCCGCCG GTGCGAATCT
 GGTGGCACCT TCGCGCCTGT CTCGCTGCT TCGATAAGTC TCTAGCCATT TAAAATTTTT GATGACCTGC
 TGCGACGCT TTTTTCTGGC AAGATAGTCT TGTAATGCG GGCCAAGATC TGCACACTGG TATTTTCGTT
 TTTGGGGCG CGGGCGGCGA CGGGGCCCGT GCGTCCCAGC GCACATGTTC GGCGAGGCGG GGCCTGCGAG
 CGCGGCCACC GAGAATCGGA CGGGGGTAGT CTCAAGCTGG CCGGCCTGCT CTGGTGCCTG GCCTCGCGCC
 GCCGTGTATC GCCCCGCCCT GGGCGGCAAG GCTGGCCCGG TCGGCACCAG TTGCGTGAGC GGAAAGATGG
 CCGCTTCCCG GCCCTGCTGC AGGGAGCTCA AAATGGAGGA CGCGGCCTC GGGAGAGCGG GCGGGTGAGT
 CACCCACACA AAGGAAAAGG GCCTTCCGT CTCAGCCGT CGTTTCATGT GACTCCACGG AGTACCGGGC
 GCCGTCCAGG CACCTCGATT AGTTCTCGAG CTTTTGAGT ACGTCTGCT TAGGTTGGGG GGAGGGGTTT
 TATGCGATGG AGTTTCCCA CACTGAGTGG GTGGAGACTG AAGTTAGGCC AGCTTGGCAC TTGATGTAAT
 TCTCCTTGA ATTTGCCCT TTTGAGTTG GATCTTGGT CATTCTCAAG CCTCAGACAG TGGTTCAAAG
 TTTTTTCTT CCATTTCAAG TGTCGTGAAT GGAGAGCGAC GAGAGCGGCC TGCCCGCCAT GGAGATCGAG
 TGCCGCATCA CCGGCACCCT GAACGGCGTG GAGTTCGAGC TGGTGGGCGG CGGAGAGGGC ACCCCCAGC
 AGGGCCGCAT GACCAACAAG ATGAAGAGCA CCAAAGGCGC CCTGACCTTC AGCCCCTACC TGCTGAGCCA
 CGTGATGGG TACGGCTTCT ACCACTTCGG CACCTACCC AGCGGCTACG AGAACCCCTT CCTGCACGCC
 ATCAACAACG GCGGCTACAC CAACACCCGC ATCGAGAAGT ACGAGGACGG CGGCGTGCT CACGTGAGCT
 TCAGTACCG CTACGAGGCC GGCCGCGTGA TCGGCAGCTT CAAGGTGATG GGCACCGGCT TCCCCGAGGA
 CAGCGTGATC TTCACCGACA AGATCATCCG CAGCAACGCC ACCGTGGAGC ACCTGCACCC CATGGGCGAT



```

AACGATCTGG ATGGCAGCTT CACCCGCACC TTCAGCCTGC GCGACGGCGG CTACTIONACAGC TCCGTGGTGG
ACAGCCACAT GCACTTCAAG AGCGCCATCC ACCCCAGCAT CCTGCAGAAC GGGGGCCCCA TGTTGCCTT
CCGCCCGGTG GAGGAGGATC ACAGCAACAC CGAGCTGGGC ATCGTGGAGT ACCAGCACGC CTTCAAGACC
CCGATGTCAG ATGCCGGTGA AGAAAGAGGA AGCGGAGCTA CTACTIONCAG CCTGCTGAAG CAGGCTGGAG
ACGTGGAGGA GAACCCTGGA CCTATGACCG AGTACAAGCC CACGGTGCGC CTCGCCACCC GCGACGACGT
CCCCAGGGCC GTACGCACCC TCGCCGCCGC GTTCGCCGAC TACCCCGCCA CGCGCCACAC CGTCGATCCG
GACCGCCACA TCGAGCGGGT CACCGAGCTG CAAGAACTCT TCCTCACGCG CGTCGGGCTC GACATCGGCA
AGGTGTGGGT CGCGGACGAC GCGCGCCGCG TGCGGTCTG GACCACGCCG GAGAGCGTCG AAGCGGGGGC
GGTGTTCGCC GAGATCGGCC CGCGCATGGC CGAGTTGAGC GGTTCGCCGC TGCCCGCGCA GCAACAGATG
GAAGGCCTCC TGGCGCCGCA CCGGCCAAG GAGCCCGCGT GGTTCCTGGC CACCGTCGGC GTCTCGCCCG
ACCACCAGGG CAAGGTCTG GGCAGCGCCG TCGTGTCTCC CGGAGTGGAG GCGGCCGAGC GCGCCGGGT
GCCCGCTTC CTGGAGACCT CCGCGCCCG CAACCTCCC TTCTACGAGC GGCTCGGCTT CACCGTCACC
GCCGACGTC AGGTGCCGA AGGACCGCG ACCTGGTCA TGACCCGAA GCCCGGTGCC TGAAACTTGT
TTATTGCAGC TTATAATGGT TACAAATAA GCAATAGCAT CACAAATTC ACAAATAAAG CATTITTTTTT
ACTGCATTCT AGTTGTGGT TGTCCAACT CATCAATGTA TCTTAATAAC TTCGTATAAT GTATGTATA CGAAGTTAT

```


Disclaimer:

These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

RefSeq:

[NM_001281501](#), [NM_001281502](#), [NM_004265](#)

UniProt ID:

[O95864](#)

Synonyms:

D6D; DES6; FADSD6; LLCDL2; SLL0262; TU13

Summary:

The protein encoded by this gene is a member of the fatty acid desaturase (FADS) gene family. Desaturase enzymes regulate unsaturation of fatty acids through the introduction of double bonds between defined carbons of the fatty acyl chain. FADS family members are considered fusion products composed of an N-terminal cytochrome b5-like domain and a C-terminal multiple membrane-spanning desaturase portion, both of which are characterized by conserved histidine motifs. This gene is clustered with family members at 11q12-q13.1; this cluster is thought to have arisen evolutionarily from gene duplication based on its similar exon/intron organization. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2013]

Product images:

