

## Product datasheet for **KN401473**

### MTCH2 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:       | MTCH2                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Locus ID:     | 23788                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Components:   | <p><b>KN401473G1</b>, MTCH2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AGGACTCCCGAACACAGTCT</p> <p><b>KN401473G2</b>, MTCH2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTCCATGGTAAAGTTTAC</p> <p><b>KN401473D</b>, Linear donor DNA containing LoxP-EF1A-tGFP-P2A-Puro-LoxP:<br/>         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)

ATAACCTTCGT ATAATGTATG CTATACGAAG TTATCGTGAG GCTCCGGTGC CCGTCAGTGG GCAGAGCGCA  
 CATCGCCAC AGTCCCGAG AAGTTGGGG GAGGGTCCG CAATTGAACC GGTGCCTAGA GAAGGTGGCG  
 CGGGGTAAAC TGGGAAAGTG ATGTCGTGTA CTGGCTCCG CTTTTCCCG AGGGTGGGG AGAACCGTAT  
 ATAAGTGAC TAGTCGCCGT GAACGTTCTT TTTCCGAACG GGTTCGCCG CAGAACACAG GTAAGTGCCG  
 TGTGTGGTTC CCGCGGGCCT GGCCTCTTA CGGGTTATGG CCCTTGCGTG CCTTGAATTA CTTCCACCTG  
 GCTGCGAGTAC GTGATTCTTG ATCCCGAGCT TCGGGTTGGA AGTGGGTGGG AGAGTTCGAG GCCTTGCGCT  
 TAAGGAGCCC CTTGCGCTCG TGCTTGAGTT GAGGCCTGGC CTGGGCGCTG GGGCCGCCG GTGCGAATCT  
 GGTGGCACCT TCGCGCCTGT CTCGCTGCTT TCGATAAGTC TCTAGCCATT TAAAATTTTT GATGACCTGC  
 TGCGACGCTT TTTTCTGGC AAGATAGTCT TGTAATGCG GGCCAAGATC TGCACACTGG TATTTTCGTT  
 TTTGGGGCG CGGGCGGCGA CGGGGCCCGT GCGTCCAGC GCACATGTTT GCGGAGGCGG GGCCTGCGAG  
 CGCGGCCACC GAGAATCGGA CGGGGGTAGT CTCAAGCTGG CCGGCCTGCT CTGGTGCCTG GCCTCGCGCC  
 GCCGTGTATC GCCCGCCCT GGGCGGCAAG GCTGGCCCG TCGGCACCAG TTGCGTGAGC GGAAAGATGG  
 CCGCTTCCG GCCCTGCTG AGGGAGCTCA AAATGGAGGA CGCGGCGCTC GGGAGAGCGG GCGGGTGAGT  
 CACCCACACA AAGGAAAAGG GCCTTCCGT CTCAGCCGT CGCTTCATGT GACTCCACGG AGTACCGGGC  
 GCCGTCCAG CACCTCGATT AGTTCTCGAG CTTTTGGAGT ACGTCGTCT TAGGTTGGGG GGAGGGGTTT  
 TATGCGATGG AGTTTCCCA CACTGAGTGG GTGGAGACTG AAGTTAGGCC AGCTTGCCAC TTGATGTAAT  
 TCTCCTTGA ATTTGCCCTT TTTGAGTTG GATCTTGGT CATTCTCAAG CCTCAGACAG TGGTTCAAAG  
 TTTTTTCTT CCATTTCAAG TGTCGTGAAT GGAGAGCGAC GAGAGCGGCC TGCCCGCCAT GGAGATCGAG  
 TGCCGCATCA CCGGCACCCT GAACGGCGTG GAGTTGAGC TGGTGGGCGG CGGAGAGGGC ACCCCGAGC  
 AGGGCCGCAT GACCAACAAG ATGAAGAGCA CCAAAGCGC CCTGACCTTC AGCCCTACC TGCTGAGCCA  
 CGTGATGGG TACGGCTTCT ACCACTTCG CACCTACCC AGCGGTACG AGAACCCCTT CCTGCACGCC  
 ATCAACAACG GCGGCTACAC CAACACCCG ATCGAGAAGT ACGAGGACGG CGGCGTGCT CACGTGAGCT  
 TCAGCTACCG CTACGAGGCC GGCCGCGTGA TCGGCGACTT CAAGGTGATG GGCACCGGCT TCCCGGAGGA  
 CAGCGTGATC TTCACCGACA AGATCATCCG CAGCAACGCC ACCGTGGAGC ACCTGCACCC CATGGGCGAT



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AACGATCTGG ATGGCAGCTT CACCCGCACC TTCAGCCTGC GCGACGGCGG CTAACACAGC TCCGTGGTGG  
ACAGCCACAT GCACTTCAAG AGCGCCATCC ACCCCAGCAT CCTGCAGAAC GGGGGCCCCA TGTTGCCTT  
CCGCCGCGTG GAGGAGGATC ACAGCAACAC CGAGCTGGGC ATCGTGGAGT ACCAGCACGC CTTCAAGACC  
CCGGATGCAG ATGCCGGTGA AGAAAGAGGA AGCGGAGCTA CTAACCTCAG CCTGCTGAAG CAGGCTGGAG  
ACGTGGAGGA GAACCTTGA CCTATGACCG AGTACAAGCC CACGGTGGC CTCGCCACCC GCGACGACGT  
CCCCAGGGCC GTACGCACCC TCGCCGCCGC GTTCGCCGAC TACCCCGCA CGGCCACAC CGTCGATCCG  
GACCGCCACA TCGAGCGGGT CACCGAGCTG CAAGAACTCT TCCTCACGCG CGTCGGGCTC GACATCGGCA  
AGGTGTGGGT CGCGGACGAC GCGCGCCGCG TGGCGGTCTG GACCACGCCG GAGAGCGTCG AAGCGGGGGC  
GGTGTTCGCC GAGATCGGCC CGCGCATGGC CGAGTTGAGC GGTTCCCGGC TGGCCGCGCA GCAACAGATG  
GAAGGCCTCC TGGCGCCGCA CCGGCCCAAG GAGCCCGCGT GGTTCTGGC CACCGTCGGC GTCTCGCCCG  
ACCACCAGGG CAAGGTCTG GGCAGCGCCG TCGTGTCTCC CGGAGTGGAG GCGGCCGAGC GCGCCGGGT  
GCCCGCCTTC CTGGAGACCT CCGCGCCCG CAACCTCCC TTCTACGAGC GGCTCGGCTT CACCGTCACC  
GCCGACGTCG AGGTGCCGA AGGACCGCGC ACCTGGTGCA TGACCCGCAA GCCCGGTGCC TGAAACTTGT  
TTATTGCAGC TTATAATGGT TACAAATAAA GCAATAGCAT CACAAATTTT ACAAATAAAG CATTTTTTTC  
ACTGCATTCT AGTTGTGGTT TGTCCAACT CATCAATGTA TCTTAATAAC TTCGTATAAT GTATGCTATA CGAAGTTAT



RefSeq:

[NM\\_001317231](#), [NM\\_001317232](#), [NM\\_001317233](#), [NM\\_014342](#)

UniProt ID:

[Q9Y6C9](#)

Synonyms:

HSPC032; MIMP; SLC25A50

Summary:

This gene encodes a member of the SLC25 family of nuclear-encoded transporters that are localized in the inner mitochondrial membrane. Members of this superfamily are involved in many metabolic pathways and cell functions. Genome-wide association studies in human have identified single-nucleotide polymorphisms in several loci associated with obesity. This gene is one such locus, which is highly expressed in white adipose tissue and adipocytes, and thought to play a regulatory role in adipocyte differentiation and biology. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. A recent study showed this gene to be an authentic stop codon readthrough target that can produce two isoforms from the same mRNA by use of alternative in-frame translation termination codons. [provided by RefSeq, Dec 2017]

## Product images:

