

## Product datasheet for **KN406699**

### **DNAI3 Human Gene Knockout Kit (CRISPR)**

#### **Product data:**

|                      |                                |
|----------------------|--------------------------------|
| <b>Product Type:</b> | Knockout Kits (CRISPR)         |
| <b>Format:</b>       | 2 gRNA vectors, 1 linear donor |
| <b>Donor DNA:</b>    | EFla-GFP-P2A-Puro              |
| <b>Symbol:</b>       | DNAI3                          |
| <b>Locus ID:</b>     | 126820                         |



Components:

**KN406699G1**, DNAI3 gRNA vector 1 in pCas-Guide CRISPR vector (GEI00002)

**KN406699G2**, DNAI3 gRNA vector 2 in pCas-Guide CRISPR vector (GEI00002)

**KN406699D**, 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.

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

ATAACTTCGT ATAATGTATG CTATACGAAG TTATCGTGAG GCTCCGGTGC CCGTCAGTGG GCAGAGCGCA CATCGCCAC  
AGTCCCGCAG AAGTTGGGGG GAGGGGTCCG CAATTGAACC GGTGCCTAGA GAAGGTGGCG CGGGGTAAC TGGGAAAGTG  
ATGTCGTGTA CTGGCTCCGC CTTTTTCCCG AGGGTGGGG AGAACCGTAT ATAAGTCAG TAGTCGCCGT GAACGTTCTT  
TTTCGCAACG GGTTCGCCG CAGAACACAG GTAAGTGCCG TGTGTGGTTC CCGCGGGCCT GGCCTCTTTA CGGGTTATGG  
CCCTTGCGTG CCTTGAATTA CTTCCACCTG GCTGCAGTAC GTGATTCTTG ATCCCGAGCT TCGGGTTGGA AGTGGGTGGG  
AGAGTTCGAG GCCTTGCGCT TAAGGAGCCC CTTGCGCTCG TGCTTGAGTT GAGGCTGGC CTGGGCGCTG GGGCCGCCG  
GTGCGAATCT GGTGGCACCT TCGCGCTGT CTCGCTGCT TCGATAAGTC TCTAGCCATT TAAATTTTTT GATGACCTGC  
TGCGACGCTT TTTTCTGGC AAGATAGTCT TGTAATGCG GGCCAAAGATC TGCACACTGG TATTTCGGTT TTTGGGGCCG  
CGGGCGGCGA CGGGGCCCGT GCGTCCCAGC GCACATGTTT GCGGAGGCGG GGCTGCGAG CGCGGCCACC GAGAATCGGA  
CGGGGGTAGT CTAAGCTGG CCGGCTGCT CTGGTGCCTG GCCTCGCGCC GCCGTGTATC GCGCGCCCTT GGGCGGCAAG  
GCTGGCCCGG TCGGCACCAG TTGCTGAGC GGAAGATGG CCGCTCCCG GCCCTGCTGC AGGGAGCTCA AAATGGAGGA  
CGCGGCGCTC GGGAGAGCGG GCGGGTGAAT CACCCACACA AAGGAAAAGG GCCTTTCGT CCTCAGCGCT CGCTTCATGT  
GACTCCACGG AGTACCGGGC GCCGTCCAGG CACCTCGATT AGTTCGCGA CTTTGGAGT ACCTCGCTT TAGGTTGGGG  
GGAGGGGTTT TATGCGATGG AGTTTCCCA CACTGAGTGG GTGGAGACTG AAGTTAGGCC AGCTTGGCAC TTGATGTAAT  
TCTCCTTGA ATTTGCCCTT TTTGAGTTG GATCTTGGT CATTCTCAAG CTTGAGACAG TGGTTCAAAG TTTTCTCTT  
CCATTTACAG TGTCGTGAAT GGAGAGCGAC GAGAGCGGCG TGCCCGCCAT GGAGATCGAG TGCCGCATCA CCGGCACCTC  
GAACGCGCTG GAGTTCGAGC TGGTGGGCGG CGGAGAGGCG ACCCCGAGC AGGGCCGCAT GACCAACAAG ATGAAGAGCA  
CCAAAGGCGC CCTGACCTTC AGCCCTACC TGCTGAGCCA CGTGATGGG TACGGCTTCT ACCACTTCGG CACTACCCC  
AGCGGCTACG AGAACCCTT CCTGCACGCC ATCAACAACG GCGGCTACAC CAACACCCG ATCGAGAAGT ACGAGGACGG  
CGCGGTGCTG CACGTGAGCT TCAGCTACCG CTACGAGGCC GGCCGCGTGA TCGCGCACTT CAAGGTGATG GGCACCGGCT  
TCCCCGAGGA CAGCGTGATC TTCACCGACA AGATCATCCG CAGCAACGCC ACCGTGGAGC ACCTGCACCC CATGGGCGAT  
AACGATCTGG ATGGCAGCTT CACCCGCACC TTCAGCCTGC GCGACGGCGG CTAACAGC TCCGTGGTGG ACAGCCACAT  
GCATTTCAAG AGCGCCATCC ACCCCAGCAT CCTGCAGAAC GGGGGCCCA TGTTGCGCTT CCGCCGCTG GAGGAGGATC  
ACAGCAACAC CGAGCTGGG ATCGTGAGT ACCAGCACGC CTTCAAGACC CCGGATGAG ATGCCGGTGA AGAAAGAGGA  
AGCGGAGCTA CTAACCTCAG CCTGCTGAAG CAGGCTGGAG ACGTGGAGGA GAACCTGGA CCTATGACCG AGTACAAGCC  
CACGGTGGC CTCGCCACCC GCGACGAGT CCCCAGGGC GTACGCACCC TCGCCGCGC GTTCGCCGAC TACCCGCCA  
CGCGCCACAC CGTCGATCCG GACCGCCACA TCGAGCGGT CACCGAGCTG CAAGAACTCT TCCTCACGCG CGTCGGGCTC  
GACATCGGCA AGGTGTGGT CGCGGACGAC GCGCGCGCGG TGCGGTCTG GACACGCCG GAGAGCGTCG AAGCGGGGGC  
GGTGTTCGCC GAGATCGGCC CGCGCATGGC CGAGTTGAGC GGTTCGCCG TGCGCGGCA GCAACAGATG GAAGGCCTCC  
TGGCGCGCA CCGGCCAAG GAGCCCGCT GGTTCCTGCG CACCGTCGCG GTCTCGCCG ACCACAGGG CAAGGGTCTG  
GGCAGCGCCG TCGTGTCCC CGGAGTGGAG GCGGCCGAGC GCGCCGGGT GCCCGCTTC CTGGAGACCT CCGCGCCCCG  
CAACCTCCCC TTCTACGAGC GGCTCGGCTT CACCGTCACC GCGGACGTCG AGGTGCCGA AGGACCGCGC ACCTGGTGCA  
TGACCCGCAA GCCCGGTGCC TGAAACTTGT TTATTGCAGC TTATAATGGT TACAAATAAA GCAATAGCAT CACAAATTC  
ACAAATAAAG CATTTTTTTC ACTGCATTCT AGTTGTGGTT TGTCCAACT CATCAATGTA TCTTAATAAC TTCGTATAAT  
GTATGCTATA CGAAGTTAT



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|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>OTI Disclaimer:</b> | 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.                                                                                      |
| <b>RefSeq:</b>         | <u><a href="#">NM_001288563</a></u> , <u><a href="#">NM_145172</a></u>                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>UniProt ID:</b>     | <u><a href="#">Q8IWG1</a></u>                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Synonyms:</b>       | DIC3; NYD-SP29                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Summary:</b>        | Acts as a negative regulator of cell migration, invasion, and metastasis downstream of p53/TP53, through inhibition of Arp2/3 complex-mediated actin polymerization (PubMed:32128961). Via its association with the multisubunit axonemal dynein complex, is potentially involved in the regulation of cilia function (By similarity). May play a role in osteogenesis of dental tissue-derived mesenchymal stem cells (By similarity).<br>[UniProtKB/Swiss-Prot Function] |

### Product images:

