

Product datasheet for **KN517421**

Tespa1 Mouse 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:	Tespa1
Locus ID:	67596



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Components:

KN517421G1, Tespal gRNA vector 1 in pCas-Guide CRISPR vector (GEI00002)

KN517421G2, Tespal gRNA vector 2 in pCas-Guide CRISPR vector (GEI00002)

KN517421D, 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
AGTCCCCGAG AAGTTGGGGG GAGGGGTCGG CAATTGAACC GGTGCCTAGA GAAGGTGGCG CGGGGTAAC TGGGAAAGTG
ATGTCGTGTA CTGGCTCCGC CTTTTTCCCG AGGGTGGGGG AGAACCGTAT ATAAGTCGAG TAGTCGCCGT GAACGTTCTT
TTTCGCAACG GGTTCGCCGC CAGAACACAG GTAAGTGCCG TGTGTGGTTC CCGCGGGCCT GGCCTCTTTA CGGGTTATGG
CCCTTGCGTG CCTTGAATTA CTTCCACCTG GCTGCAGTAC GTGATTCTTG ATCCCGAGCT TCGGGTTGGA AGTGGGTGGG
AGAGTTCGAG GCCTTGCGCT TAAGGAGCCC CTTCGCCTCG TGCTTGAGTT GAGGCTGGC CTGGGCGCTG GGGCCGCCGC
GTGCGAATCT GGTGGCACCT TCGCGCTGT CTCGCTGCTT TCGATAAGTC TCTAGCCATT TAAATTTTTT GATGACCTGC
TGCGACGCTT TTTTCTGGC AAGATAGTCT TGTAATGCG GGCCAAGATC TGCACACTGG TATTTCGGTT TTTGGGGCCG
CGGGCGGCGA CGGGGCCCGT GCGTCCCAGC GCACATGTTT GGCGAGGCGG GGCTGCGAG CGCGGCCACC GAGAATCGGA
CGGGGGTAGT CTAAGCTGG CCGGCCTGCT CTGGTGCCTG GCCTCGCGCC GCCGTGTATC GCGCCGCCCT GGGCGGCAAG
GCTGGCCCGG TCGGCACCAG TTGCGTGAGC GGAAGATGG CCGCTCCCCG GCCCTGCTGC AGGGAGCTCA AAATGGAGGA
CGCGGCGCTC GGGAGAGCGG GCGGGTGAGT CACCCACACA AAGGAAAAGG GCCTTTCCTG CCTCAGCCGT CGCTTCATGT
GACTCCACGG AGTACCGGGC GCCGTCCAGG CACCTCGATT AGTTCCTGAG CTTTGGAGT ACCTCGTCTT TAGGTTGGGG
GGAGGGGTTT TATGCGATGG AGTTTCCCA CACTGAGTGG GTGGAGACTG AAGTTAGGCC AGCTTGGCAC TTGATGTAAT
TCTCCTTGA ATTTGCCCTT TTTGAGTTG GATCTTGTT CATTCTCAAG CCTCAGACAG TGTTTCAAG TTTTTTCTT
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
CGGCGTGCTG CACGTGAGCT TCAGCTACCG CTACGAGGCC GGCCGCGTGA TCGCGCACTT CAAGGTGATG GGCACCGGCT
TCCCCGAGGA CAGCGTGATC TTCACCGACA AGATCATCCG CAGCAACGCC ACCGTGGAGC ACCTGCACCC CATGGGCGAT
AACGATCTGG ATGGCAGCTT CACCCGCACC TTCAGCCTGC GCGACGGCGG CTAACAGC TCCGTGGTGG ACAGCCACAT
GCACTTCAAG AGCGCCATCC ACCCCAGCAT CCTGCAGAAC GGGGGCCCCA TGTTGCCTT CCGCCGCGTG GAGGAGGATC
ACAGCAACAC CGAGCTGGG ATCGTGAGT ACCAGCACGC CTTCAAGACC CCGGATGAG ATGCCGGTGA AGAAAGAGGA
AGCGGAGCTA CTAACCTCAG CCTGCTGAAG CAGGCTGGAG ACGTGGAGGA GAACCTGGA CCTATGACCG AGTACAAGCC
CACGGTGCGC CTCGCCACCC GCGACGAGT CCCCAGGGCC GTACGCACCC TCGCCGCGCG GTTCGCCGAC TACCCGCCA
CGCGCCACAC CGTCGATCCG GACCGCCACA TCGAGCGGT CACCGAGCTG CAAGAACTCT TCCTCACGCG CGTCGGGCTC
GACATCGGCA AGGTGTGGT CGCGGACGAC GCGCGCGCGG TGCGGTCTG GACCACGCCG GAGAGCGTCG AAGCGGGGGC
GGTGTTCGCC GAGATCGGCC CGCGCATGGC CGAGTTGAGC GGTTCGCCG TGCGCGCGCA GCAACAGATG GAAGGCCTCC
TGGCGCCGCA CCGGCCAAG GAGCCCGCT GGTTCCTGCG CACCGTCGCG GTCTCGCCCG ACCACAGGG CAAGGGTCTG
GGCAGCGCCG TCGTGCTCCC CGGAGTGGAG GCGGCCGAGC GCGCCGGGT GCCCGCTTC CTGGAGACCT CCGCGCCCCG
CAACCTCCCC TTCTACGAGC GGCTCGGCTT CACCGTCACC GCGGACGTCG AGGTGCCGA AGGACCGCGC ACCTGGTGCA
TGACCCGCAA GCCCGTGCC TGAAACTTGT TTATTGCAGC TTATAATGGT TACAAATAAA GCAATAGCAT CACAAATTC
ACAAATAAAG CATTTTTTTC ACTGCATTCT AGTTGTGGTT TGTCCAACT CATCAATGTA TCTTAATAAC TTCGTATAAT
GTATGCTATA CGAAGTTAT



OTI 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_183264
UniProt ID:	Q3UI32
Synonyms:	5830405N20Rik; A430001F24Rik; AI450549
Summary:	May play a role in the regulation of inositol 1,4,5-trisphosphate receptor-mediated Ca^{2+} release and mitochondrial Ca^{2+} uptake via the mitochondria-associated endoplasmic reticulum membrane (MAM) compartment (By similarity). Required for the development and maturation of T-cells, its function being essential for the late stages of thymocyte development. Plays a role in T-cell antigen receptor (TCR)-mediated activation of the ERK and NFAT signaling pathways, possibly by serving as a scaffolding protein that promotes the assembly of the LAT signalosome in thymocytes.[UniProtKB/Swiss-Prot Function]

Product images:

