

Product datasheet for **KN213312RB**

Tau (MAPT) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control
Donor DNA:	RFP-BSD
Symbol:	Tau
Locus ID:	4137
Components:	<p>KN213312G1, Tau gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CACGCTGGGACGTACGGGTT</p> <p>KN213312G2, Tau gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CCGCCAGGAGTTCGAAGTGA</p> <p>KN213312RBD, donor DNA containing left and right homologous arms and RFP-BSD functional cassette.</p>

Homologous arm and RFP-BSD sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **RFP-BSD in green**; **Right arm in violet**

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AAGGCGAGTT ACATGATCCC CCATGTTGTG CAAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC
AGAAGTAAGT TGGCCGCAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTC TGAGAATAGT GTATGCGGGC
ACCGAGTTGC TCTTGCCCGG CGTCAATACG GGATAATACC GCGCCACATA GCAGAATTTT AAAAGTGCTC
ATCATTGGAA AACGTTCTTC GGGGCGAAAA CTCTCAAGGA TCTTACCCTG GTTGAGATCC AGTTCGATGT
AACCCACTCG TGCACCCAAC TGATCTTCAG CATCTTTTAC TTTCACCAGC GTTTCTGGGT GAGCAAAAAC
AGGAAGGCAA AATGCCGCAA AAAAGGGAAT AAGGGCGACA CGGAAATGTT GAATACTCAT ACTCTTCCTT
TTTCAATATT ATTGAAGCAT TTATCAGGGT TATTGTCTCA TGAGCGGATA CATATTTGAA TGTATTTAGA
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TATCATGACA TTAACCTATA AAAATAGGCG TATCACGAGG CCCTTTCGGG TCGCGGTTT CGGTGATGAC
GGTAAAACC TCTGACACAT GCAGCTCCCG TTGACGGTCA CAGCTTGCT GTAAAGCGAT GCCGGGAGCA
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GCAGATTGTA CTGAGAGTGC ACCATAAAAT TGTAACGTT AATATTTTGT TAAAATTCGC GTTAAATTTT
TGTTAAATCA GCTCATTITT TAACCAATAG GCCGAAATCG GCAAAATCCC TTATAATCA AAAGAATAGC
CCGAGATAGG GTTGAGTGTT GTTCCAGTTT GGAACAAGAG TCCACTATTA AAGAACGTGG ACTCCAACGT
CAAAGGGCGA AAAACCGTCT ATCAGGGCGA TGGCCCACTA CGTGAACCAT CACCCAATC AAGTTTTTTG
GGGTCGAGGT GCCGTAAAGC ACTAAATCGG AACCCATAAG GGAGCCCCCG ATTTAGAGCT TGACGGGGAA
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AGCGGTACG CTGCGGTAA CCACCACACC CGCCGCGCTT AATGCGCCGC TACAGGGCGC GACTATGGT
TGCTTTGACG TATGCGGTGT GAAATACCGC ACAGATCGCT AAGGAGAAAA TACCGCATCA GGCGCCATTC
GCCATTCAGG CTGCGCAACT GTTGGGAAGG GCGATCGGTG CGGGCCTCTT CGCTATTACG CCAGCTGGCG
AAAGGGGAT GTGCTGCAAG GCGATTAAGT TGGGTAACGC CAGGGTTTTT CCAGTACGA CGTTGTAATA
CGACGGCCAG TGAATTGGAG GCTACAGTCA GTGGAGAGGA CTTTCACAGG CTGTCGCCGT GCTCATTGTA

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TAACTGCCCG TTATTCATGC GACACGAGAC AGAGTTTCAC CCTGTCACCC AGGCTGGAGT GCAGTGGTGT
 AATCTCAGCT CACTGCAACC TCCACCTGCC AGGTTCAATT GATTCTCCTG CCTCAGCCTC CCCAGTAGCT
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 GTGCTCACAG CAACAGCCCA CAGTGCAGCC CGAGGGCAGG ATGGACTCAT CACTCTCGCC GGTGAGACTT
 TAGATCAGAA GGGATCTTGC TGCCGCCCGA AAGAGGAAGG GCTGGAAGAG GAAGGAGCTT GGCCTAATCA
 TGGTCATAGC TGTTTCCTGT GTGAAATTGT TATCCGCTCA CAATCCACA CAACATACGA GCCGGAAGCA
 TAAAGTGTA AGCCTGGGGT GCCTAATGAG TGAGCTAACT CACATTAATT GCGTTGCGCT CACTGCCCGC
 TTTCCAGTCG GGAACCTGT CGTGCCAGCT GCATTAATGA ATCGGCCAAC GCGCGGGGAG AGGCGGTTTG
 CGTATTGGGC GCTTCCGCGC TTCCTCGCTC ACTGACTCGC TGCCTCGGT CGTTCGGCTG CGGCGAGCGG
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 AGCAAAAGGC CAGCAAAAGG CCAGGAACCG TAAAAAGGCC GCGTTGCTGG CGTTTTTCCA TAGGCTCCGC
 CCCCTGACG AGCATCACAA AAATCGACGC TCAAGTCAGA GGTGGCGAAA CCCGACAGGA CTATAAAGAT
 ACCAGGCGTT TCCCCTGGA AGCTCCCTCG TGCGCTCTCC TGTTCCGACC CTGCCGCTTA CCGGATACCT
 GTCGCGCTTT CTCCCTTCGG GAAGCGTGGC GCTTTCAT AGCTCACGCT GTAGGTATCT CAGTTCGGTG
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 GATCCGGCAA ACAAAACCACC GCTGGTAGCG GTGGTTTTTT TGTGCAAG CAGCAGATTA CGCGCAGAAA
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 TAAGGGATTT TGGTCATGAG ATTATCAAAA AGGATCTTCA CCTAGATCCT TTTAAATTA AAATGAAGTT
 TTAATCAAT CTAAAGTATA TATGAGTAAA CTTGGTCTGA CAGTTACCAA TGCTTAATCA GTGAGGCACC
 TATCTCAGCG ATCTGTCTAT TTCGTTTCATC CATAGTTGCC TGACTCCCCG TCGTGTAGAT AACTACGATA
 CGGGAGGGCT TACCATCTGG CCCAGTGCT GCAATGATAC CGCGAGAACC ACGCTCACCG GCTCCAGATT
 TATCAGCAAT AAACCAGCCA GCCGGAAGGG CCGAGCGCAG AAGTGGTCT GCAACTTTAT CCGCTCCAT
 CCAGTCTATT AATTGTTGCC GGAAGCTAG AGTAAGTAGT TCGCCAGTTA ATAGTTTGGC CAACGTTGTT
 GCCATTGCTA CAGGCATCGT GGTGTCACGC TCGTCTTTG GTATGGCTTC ATTCAGCTCC GGTCCCAAC GATC

GE100003, scramble sequence in pCas-Guide vector

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_001123066](#), [NM_001123067](#), [NM_001203251](#), [NM_001203252](#), [NM_005910](#), [NM_016834](#), [NM_016835](#), [NM_016841](#), [NM_173727](#)

UniProt ID:

[P10636](#)

Synonyms: DDPAC; FTDP-17; MAPTL; MSTD; MTBT1; MTBT2; PPND; PPP1R103; TAU

Summary: This gene encodes the microtubule-associated protein tau (MAPT) whose transcript undergoes complex, regulated alternative splicing, giving rise to several mRNA species. MAPT transcripts are differentially expressed in the nervous system, depending on stage of neuronal maturation and neuron type. MAPT gene mutations have been associated with several neurodegenerative disorders such as Alzheimer's disease, Pick's disease, frontotemporal dementia, cortico-basal degeneration and progressive supranuclear palsy. [provided by RefSeq, Jul 2008]

Product images:

