

Product datasheet for **KN204242**

TAP1 Human Gene Knockout Kit (CRISPR)

Product data:

| | |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Type: | Knockout Kits (CRISPR) |
| Format: | 2 gRNA vectors, 1 GFP-puro donor, 1 scramble control |
| Donor DNA: | GFP-puro |
| Symbol: | TAP1 |
| Locus ID: | 6890 |
| Components: | KN204242G1 , TAP1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTCCTCCCCTACTGGCGGCT KN204242G2 , TAP1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCTGAGCTTCTCGCCAGCGC KN204242D , donor DNA containing left and right homologous arms and GFP-puro functional cassette. |

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

```

AAGGCGAGTT ACATGATCCC CCATGTTGTG CAAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC
AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTC TGAGAATAGT GTATGCCGGC
ACCGAGTTGC TCTTGCCCGG CGTCAATACG GGATAATACC GCGCCACATA GCAGAATTTT AAAAGTGCTC
ATCATTGGAA AACGTTCTTC GGGGCGAAAA CTCTCAAGGA TCTTACCCTG GTTGAGATCC AGTTCGATGT
AACCCACTCG TGCACCCAAC TGATCTTCAG CATCTTTTAC TTTCAACCAGC GTTTCTGGGT GAGCAAAAAC
AGGAAGGCAA AATGCCGCAA AAAAGGGAAT AAGGGCGACA CGGAAATGTT GAATACTCAT ACTCTTCCTT
TTTCAATATT ATTGAAGCAT TTATCAGGGT TATTGTCTCA TGAGCGGATA CATATTTGAA TGTATTTAGA
AAAATAAACA AATAGGGGTT CCGCGCACAT TTCCCGGAAA AGTGCCACCT GACGTCTAAG AAACCATTAT
TATCATGACA TTAACCTATA AAAATAGGCG TATCACGAGG CCCTTTCGGG TCGCGGTTT CGGTGATGAC
GGTAAAACC TCTGACACAT GCAGCTCCCG TTGACGGTCA CAGCTTGCT GTAAAGCGGAT GCCGGGAGCA
GACAAGCCCG TCAGGGCGCG TCAGCGGGTG TTGGCGGGTG TCGGGGCTGG CTTAACTATG CGGCATCAGA
GCAGATTGTA CTGAGAGTGC ACCATAAAAT TGTAACGTT AATATTTTGT TAAAATTGCG GTTAAATTTT
TGTTAAATCA GCTCATTTTT TAACCAATAG GCCGAAATCG GCAAAATCCC TTATAATCA AAAGAATAGC
CCGAGATAGG GTTGAGTGTT GTTCCAGTTT GGAACAAGAG TCCACTATTA AAGAACGTGG ACTCCAACGT
CAAAGGGCGA AAAACCGTCT ATCAGGGCGA TGGCCCACTA CGTGAACCAT CACCCAATC AAGTTTTTTG
GGTTCGAGGT GCCGTAAAGC ACTAAATCGG AACCCATAAG GGAGCCCCCG ATTTAGAGCT TGACGGGGAA
AGCCGGCGAA CGTGCGGAGA AAGGAAGGGA AGAAAGCGAA AGGAGCGGGC GCTAGGGCGC TGGCAAGTGT
AGCGGTACG CTGCGGTAA CCACCACACC CGCCGCGCTT AATGCGCCGC TACAGGGCGC GACTACTGGT
TGCTTTGACG TATGCGGTGT GAAATACCGC ACAGATCGCT AAGGAGAAAA TACCGCATCA GGCGCCATTC
GCCATTCAGG CTGCGCAACT GTTGGGAAGG GCGATCGGTG CGGGCCTCTT CGCTATTACG CCAGCTGGCG
AAAGGGGAT GTGCTGCAAG GCGATTAAGT TGGGTAACGC CAGGGTTTTC CCAGTACGA CGTTGTAATA
CGACGGCCAG TGAATTGGAG GCTACAGTCA GTGGAGAGGA CTTTCACTGA CTGACTGACT GGAAGACACA

```



[View online »](#)

CCTCTGCTAC AGGCGACCTC CCTGCGCTCC CGTTGGTCTC TGCATTCACT TCTCCGCGCG CGCTTCCAGG
 GTCCCCTGGC CGCTGCATCT CCTCCACCCC TCTGCCAACCT CAAGCCCA GACCCATTAC CCCGGTGTGG
 ACTTCTCCCG CCCGGGGTAA GTCCCCGGTT GGTGCTCCCG CCCGCAGCAT CCCTGCAAGG CACCGTCTC
 CTCGCCGCTT GGGGCACTGG TTTCCAACCT GGGACAGCGC ACAACGCGCA GCCGACAGCC CCGCCCTTC
 GCGGCGCCGC CAGGAGGCGC CTGGGTGCTG CGGGGCTGCT TTGCGCGCGG CGCTAACGTG TGTAGGGCAG
 ATCTGCCCCG AGACAAGTGA CGAGGCAGCC CCGCCCTGAG GCTGGGGTGG GAAAACCTGG GCAAGTGGAA
 AGGCAGGAGG CAGGGAGAGG CGAGAAGGGT GTGCGTGATG GAGAAAATTG GGCACCAGG CTGCTCCCGA
 GATTCTCAGA TCTGATTTCC ACGCTTGCTA CCAAAATAGT CTGGGCAGGC CACTTTTGA AGTAGGCGTT
 ATCTAGTGAG CAGGCGGCCG CTTTCGATTT CGCTTTCCCC TAAACTAGCA TGGAGAGCGA CGAGAGCGGC
 CTGCCCGCCA TGGAGATCGA GTGCCGCATC ACCGGCACCC TGAACGGCGT GGAGTTCGAG CTGGTGGGCG
 GCGGAGAGGG CACCCCGAG CAGGGCCGCA TGACCAACA GATGAAGAGC ACCAAAGGCG CCCTGACCTT
 CAGCCCCTAC CTGCTGAGCC ACGTGATGGG CTACGGCTTC TACCACTTCG GCACCTACCC CAGCGGCTAC
 GAGAACCCCT TCCTGCACGC CATCAACAAC GCGGCTACA CCAACACCCG CATCGAGAAG TACGAGGACG
 GCGGCGTGCT GCACGTGAGC TTCAGCTACC GCTACGAGGC CGGCCGCGTG ATCGGCGACT TCAAGGTGAT
 GGGCACCGGC TTCCCGAGG ACAGCGTGAT CTTACCAGC AAGATCATCC GCAGCAACGC CACCGTGGAG
 CACCTGCACC CCATGGGCGA TAACGATCTG GATGGCAGCT TCACCCGCAC CTTACAGCTG CGCGACGGCG
 GCTACTACAG CTCCGTGGTG GACAGCCACA TGCACTTCAA GAGCGCCATC CACCCAGCA TCCTGCAGAA
 CGGGGGCCCC ATGTTCCGCT TCCGCCGCGT GGAGGAGGAT CACAGCAACA CCGAGCTGGG CATCGTGGAG
 TACCAGCAGC CCTTCAAGAC CCCGGATGCA GATGCCGGTG AAGAAAGAGT TTAAGAATTC CGATCATATT
 CAATAACCT TAATATACT TCGTATAATG TATGCTATAC GAAGTTATTA GGTCTGAAGA GGAGTTTACG
 TCCAGCCAAG CTTAGGATCT CGACCTCGAA ATTCTACCGG GTAGGGGAGG CGCTTTTCCC AAGGCAGTCT
 GGAGCATCGC CTTTAGCAGC CCCGTGGGC ACTTGGCGCT ACACAAGTGG CCTCTGGCCT CGCACACATT
 CCACATCCAC CGGTAGGCGC CAACCGACTC CGTTCTTTGG TGGCCCTTC GAGCCACCTT CTACTCTCC
 CCTAGTCAGG AAGTTCCCCC CGCCCCGCA GCTCGCGTCG TGCAGGACGT GACAAAATGGA AGTAGCACGT
 CTCACTAGTC TCGTGCAGAT GGACAGCACC GCTGAGCAAT GGAAGCGGGT AGGCCTTTGG GGCAGCGGCC
 AATAGCAGCT TTGCTCCTTC GCTTTCTGGG CTCAGAGGCT GGAAGGGGT GGGTCCGGGG GCGGGCTCAG
 GGGCGGGCTC AGGGGCGGGG CGGGCGCCCG AAGGTCTCC GGAGGCCCGG CATTCTGCAC GCTTCAAAAG
 CGCACGTCTG CCGCGCTGTT CTCCTCTTCC TCATCTCCGG GCCTTTTCGAC CTGCATCCAT CTAGATCTCG
 AGCAGCTGAA GCTTACCATG ACCGAGTACA AGCCACGGT GCGCCTCGCC ACCCGCAGC ACGTCCCAG
 GGGCGTACG ACCCTCGCG CCGCGTTCG CACTACCC GCCACGCGCC ACACCGTGA TCCGGACCGC
 CACATCGAGC GGGTCACCGA GCTGCAAGAA CTCTTCTCA CGCGCGTCGG GCTCGACATC GGCAAGGTGT
 GGGTCGCGGA CGACGGCGCC GCGGTGGCGG TCTGACCAC GCCGGAGAGC GTCGAAGCGG GGGCGGTGTT
 CGCCGAGATC GGCCCGCGCA TGGCCGAGTT GAGCGGTTCC CGGCTGGCCG CGCAGCAACA GATGGAAGGC
 CTCTGGCGC CGCACCGGCC CAAGGAGCCC GCGTGGTTCC TGGCCACCGT CGGCGTCTCG CCCGACCACC
 AGGGCAAGGG TCTGGGCAGC GCCGTCGTGC TCCCCGAGT GGAGGCCGCC GAGCGCGCCG GGGTCCCCGC
 CTTCTGGAG ACCTCCGCGC CCCACAACCT CCCCTTCTAC GAGCGGCTCG GCTTACCGT CACCGCCGAC
 GTCGAGGTGC CCGAAGGACC GCGCACCTGG TGCATGACCC GCAAGCCCGG TGCCTGACGC CCGCCCCAG
 ACCCGCAGC CCCGACCGAA AGGAGCGCAT GACCCCATGC ATCGATGATA TCAGATCCCC GGGATCGAGA
 AATTGATGAT CTATTAACA ATAAAGATGT CCACTAAAAT GGAAGTTTTT CCTGTACAT TTTGTTAAGA
 AGGGTGAGAA CAGAGTACCT ACATTTTGAA TGAAGGATT GGAGCTACGG GGGTGGGGT GGGGTGGGAT
 TAGATAAATG CCTGCTCTTT ACTGAAGGCT CTTTACTATT GCTTTATGAT AATGTTTCAT AGTTGGATAT
 CATAATTTAA ACAAGCAAAA CCAAAATTAAG GGCCAGCTCA TTCCTCCAC TCATGATCTA TAGATCTATA
 GATCTCTCGT GGGATCATTG TTTTCTCTT GATTCCACT TTGTGGTTCT AAGTACTGTG GTTTCCAAAT
 GTGTCAAGTT CATAGCCTGA AGAACGAGAT CAGCAGCTC TGTTCCACAT ACACTTCATT CTCAGTATTG
 TTTTGCCAAG TTCTAATTCC ATCAGAAGCT GGTGAGATC CGGAACCCTT AATATAACTT CGTATAATGT
 ATGCTATACG AAGTTATTAG GTCCTCGAA GAGGTTCACT AGGCGCGCCA **GCTTCTCTCG** **CATGGTGGG**
GACAGTACTG **CTACTTCTCG** **CCGACTGGGT** **GCTGCTCCGG** **ACCGCGCTGC** **CCCGCATATT** **CTCCCTGCTG**
GTGCCACCG **CGCTGCCACT** **GCTCCGGTGC** **TGGGCGGTGG** **GCCTGAGCCG** **CTGGGCCGTG** **CTCTGGCTGG**
GGGCTGCGG **GGTCTCAGG** **GCAACGGTTG** **GCTCCAAGAG** **CGAAAACGCA** **GGTGCCAGG** **GCTGGCTGGC**
TGCTTTGAAG **CCATTAGCTG** **CGGCACTGGG** **CTTGGCCCTG** **CCGGGACTTG** **CCTTGTTCGG** **AGAGCTGATC**
TCATGGGAG **CCCCGGGTC** **CGCGGATAGC** **ACCAGGCTAC** **TGCACTGGGG** **AAGTACCCT** **ACCGCTTTCG**
TTGTCAAGTTA **TGCAGCGGCA** **CTGCCCGCAG** **CAGCCCTGTG** **GCACAACTC** **GGGAGCTCT** **GGGTGCCCGG**

CGGTCAGGGC GGCTCTGGAA ACCCTGTGCG TCGGCTTCTA GGCTGCCTGG GCTCGGAGAC GCGCCGCCTC
 TCGCTGTTC TGGTCTGGT GGTCTCTCC TCTCTTGGTA AGGGGAACGC AGGGCAAGAG GGGAGGACAC
 AAGGGGACTG GGACAGGAAA CGACAGTCTT CACTGACTGA CTGACTGGAA AGAGGAAGGG CTGGAAGAGG
 AAGGAGCTTG GCGTAATCAT GGTCATAGCT GTTTCCTGTG TGAAATTGTT ATCCGCTCAC AATTCCACAC
 AACATACGAG CCGGAAGCAT AAAGTGTAAA GCCTGGGGTG CCTAATGAGT GAGCTAACTC ACATTAATTG
 CGTTGCGCTC ACTGCCCGCT TTCCAGTCGG GAAACCTGTC GTGCCAGCTG CATTAAATGAA TCGGCCAACG
 CGCGGGGAGA GCGGTTTTGC GTATTGGGCG CTCTTCCGCT TCCTCGCTCA CTGACTCGCT GCGCTCGGTC
 GTTCGGCTGC GCGGAGCGT ATCAGCTCAC TCAAAGGCGG TAATACGGTT ATCCACAGAA TCAGGGGATA
 ACGCAGGAAA GAACATGTGA GCAAAAAGCC AGCAAAAAGC CAGGAACCGT AAAAAGGCCG CGTTGTGTCG
 GTTTTTCCAT AGGCTCCGCC CCCCTGACGA GCATCACAAA AATCGACGCT CAAGTCAGAG GTGGCGAAAC
 CCGACAGGAC TATAAGATA CCAGGCGTTT CCCCTGGAA GCTCCCTCGT GCGCTCTCCT GTTCCGACCC
 TGCCGCTTAC CGGATACCTG TCCGCCTTTC TCCCTTCGGG AAGCGTGGCG CTTTCTCATA GCTCACGCTG
 TAGGTATCTC AGTTCGGTGT AGGTCGTTCC CTCCAAGCTG GGCTGTGTGC ACGAACCCCG CGTTCAGCCC
 GACCGCTGCG CTTATCCGG TAACTATCGT CTTGAGTCCA ACCCGTAAG ACACGACTTA TCGCCACTGG
 CAGCAGCCAC TGGAACAGG ATTAGCAGAG CGAGGTATGT AGGCGGTGCT ACAGAGTTCT TGAAGTGGTG
 GCCTAACTAC GGCTACACTA GAAGAACAGT ATTTGGTATC TCGCTCTGCG TGAAGCCAGT TACCTTCGGA
 AAAAGAGTTG GTAGCTCTTG ATCCGGCAAA CAAACCACCG CTGGTAGCGG TGGTTTTTTT GTTTGCAAGC
 AGCAGATTAC GCGCAGAAA AAAGGATCTC AAGAAGATCC TTTGATCTTT TCTACGGGGT CTGACGCTCA
 GTGGAACGAA AACTCACGTT AAGGGATTTT GGTCATGAGA TTATCAAAAA GGATCTTCAC CTAGATCCTT
 TAAATTTAAA AATGAAGTTT TAAATCAATC TAAAGTATAT ATGAGTAAAC TTGGTCTGAC AGTTACCAAT
 GCTTAATCAG TGAGGCACCT ATCTCAGCGA TCTGTCTATT TCGTTCATCC ATAGTTGCCCT GACTCCCCGT
 CGTGATAGATA ACTACGATAC GGGAGGGCTT ACCATCTGGC CCCAGTGCTG CAATGATACC GCGAGAACCA
 CGCTCACCGG CTCCAGATTT ATCAGCAATA AACCAGCCAG CCGGAAGGGC CGAGCGCAGA AGTGGTCTCTG
 CAACCTTATC CGCCTCCATC CAGTCTATTA ATTGTTGCCG GGAAGCTAGA GTAAGTAGTT CGCCAGTTAA
 TAGTTTGCGC AACGTTGTTG CCATTGCTAC AGGCATCGTG GTGTCACGCT CGTCGTTTGG TATGGCTTCA
 TTCAGCTCCG GTTCCCAACG ATC

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_000593](#), [NM_001292022](#)

UniProt ID:

[Q03518](#)

Synonyms:

ABC17; ABCB2; APT1; D6S114E; PSF-1; PSF1; RING4; TAP1 0102N; TAP1N

Summary:

The membrane-associated protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the MDR/TAP subfamily. Members of the MDR/TAP subfamily are involved in multidrug resistance. The protein encoded by this gene is involved in the pumping of degraded cytosolic peptides across the endoplasmic reticulum into the membrane-bound compartment where class I molecules assemble. Mutations in this gene may be associated with ankylosing spondylitis, insulin-dependent diabetes mellitus, and celiac disease. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2014]

Product images:

