

## Product datasheet for **KN210597**

### VPS35 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:	VPS35
Locus ID:	55737
Components:	<p><b>KN210597G1</b>, VPS35 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AGAGAGCAGGGGCTACAAGG</p> <p><b>KN210597G2</b>, VPS35 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CCACTCGCTGGAGTGCGGGG</p> <p><b>KN210597D</b>, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

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
ATCATTTGAA AACGTTCTTC GGGCGAAAAA CTCTCAAGGA TCTTACCGT GTTGAGATCC AGTTCGATGT
AACCCACTCG TGCACCCAAC TGATCTTCAG CATCTTTTAC TTTACCAGC GTTTCTGGGT GAGCAAAAAC
AGGAAGGCAA AATGCCGCAA AAAAGGGAAT AAGGGCGACA CGGAAATGTT GAATACTCAT ACTCTTCCTT
TTTCAATATT ATTGAAGCAT TTATCAGGT TATTGTCTCA TGAGCGGATA CATATTTGAA TGTATTTAGA
AAAATAACA AATAGGGGTT CCGCGCAT TCCCGGAAA AGTGCCACCT GACGTCTAAG AAACCATTAT
TATCATGACA TTAACCTATA AAAATAGGCG TATCACGAGG CCCTTTCGGG TCGCGGTTT CGGTGATGAC
GGTAAAACC TCTGACACAT GCAGCTCCG TTGACGGTCA CAGCTTGCT GTAAGCGGAT GCCGGGAGCA
GACAAGCCG TCAGGGCGC TCAGCGGGT TTGGCGGGT TCGGGGCTG CTTAACTATG CGGCATCAGA
GCAGATTGTA CTGAGAGTGC ACCATAAAT TGTAACGTT AATATTTTGT TAAAATTCGC GTTAAATTTT
TGTTAAATCA GCTCATTTT TAACCAATAG GCCGAAATCG GCAAAATCCC TTATAATCA AAAGAATAGC
CCGAGATAGG GTTGAGTGTT GTTCCAGTTT GGAACAAGAG TCCACTATTA AAGAACGTGG ACTCCAACGT
CAAAGGGCGA AAAACCGTCT ATCAGGGCGA TGGCCCACTA CGTGAACCAT CACCAAATC AAGTTTTTTG
GGTTCGAGT GCCGTAAAGC ACTAAATCGG AACCCATAAG GGAGCCCCG ATTTAGAGCT TGACGGGGAA
AGCCGGCGAA CGTGCGGAGA AAGGAAGGGA AGAAAGCGAA AGGAGCGGGC GCTAGGGCGC TGGCAAGTGT
AGCGGTACG CTGCGGTAA CCACCACACC CGCCGCGCTT AATGCGCCG TACAGGGCGC GACTATGGT
TGCTTTGACG TATGCGGTGT GAAATACCGC ACAGATCGCT AAGGAGAAAA TACCGCATCA GGCGCCATC
GCCATTCAGG CTGCGCAACT GTTGGGAAGG GCGATCGGTG CGGGCCTCTT CGTATTACG CCAGCTGGCG
AAAGGGGAT GTGCTGCAAG GCGATTAAGT TGGTAACGC CAGGGTTTTC CCAGTACGA CGTTGTAATA
CGACGGCCAG TGAATTGGAG GCTACAGTCA GTGGAGAGGA CTTTCACTGA CTGACTGACT GCGTCTCAAC
  
```



[View online »](#)

CTCTAGGCGC CCGATCAGCT CCGACCCCAT GCGCCCGCA CTAAAGCGAA CAATTCCCGT GAACGCCGCG  
 GGTCAACGAA ACCCGCGCGC AAAGGCTGCA CCGGCCAGTG AGAGCCAGGC CCCACCCCGG GCGCATCTGG  
 ATTGGTTAGG ACAGGACGTT GAGACCGTCC CACAAACCAA TCAGGGTCTT CCTTTTGCGC ATGCGCATCA  
 ATAGCGCAAT CGCCAACGCA GATGCGGTGA ACGTGGACTT GTCGGCTCCC CCTCCTTCCA TTCCTTCTTG  
 ACAAATCAT CACACTGTC CTTTCCCTCC TGTTGTCTCC TGCCTGCCGC CGGGCGATCC CCACTGCCCT  
 GCACTGTCC GCCACTCTC GCACGCTGTG GTGAGATTGG CTGGCGCTCA GGTCCGTCCA TCTAGCGTTA  
 AGTGACAGGG CCAATAAGCA CGCGAGACTC GGGTTCCTAG AAGTAGGCCA ATCAATGAGC CGCCTGTAGG  
 GCCCGGGGCG GGGGCTAGAG AGGGCGGGGC TTGGAGGGGC CGCAGCGTCA CATGACCGCG GGAGGCTACG  
 CGCGGGGCGG GTGCTGCTTG CTGCAGGCTC TGGGGAGTCG CCACTAGCAT GGAGAGCGAC GAGAGCGGCC  
 TGCCCGCCAT GGAGATCGAG TGCCGCATCA CCGGCACCCG GAACGGCGTG GAGTTCGAGC TGGTGGGCGG  
 CGGAGAGGGC ACCCCGAGC AGGGCCGCAT GACCAACAAG ATGAAGAGCA CCAAAGGCGC CCTGACCTTC  
 AGCCCTACC TGCTGAGCCA CGTGATGGGC TACGGCTTCT ACCACTTCGG CACCTACCCC AGCGGTACG  
 AGAACCCCTT CCTGCACGCC ATCAACAACG GCGGCTACAC CAACACCCGC ATCGAGAAGT ACGAGGACGG  
 CGGCGTGCTG CACGTGAGCT TCAGTACCG CTACGAGGCC GGCCGCGTGA TCGGCGACTT CAAGGTGATG  
 GGCACCGGCT TCCCGAGGA CAGCGTGATC TTCACCGACA AGATCATCCG CAGCAACGCC ACCGTGGAGC  
 ACCTGCACCC CATGGGCGAT AACGATCTGG ATGGCAGCTT CACCCGACC TTCAGCCTGC GCGACGGCGG  
 CTACTACAGC TCCGTGGTGG ACAGCCACAT GCACTTCAAG AGCGCCATCC ACCCCAGCAT CCTGCAGAAC  
 GGGGGCCCA TGTTGCGCTT CCGCCGCGTG GAGGAGGATC ACAGCAACAC CGAGCTGGGC ATCGTGGAGT  
 ACCAGCACGC CTTCAAGACC CCGGATGCAG ATGCCGGTGA AGAAAGAGTT TAAGAATTCC GATCATATTC  
 AATAACCCTT AATATAACTT CGTATAATGT ATGCTATACG AAGTTATTAG GTCTGAAGAG GAGTTTACGT  
 CCAGCCAAGC TTAGGATCTC GACCTCGAAA TTCTACCGGG TAGGGGAGGC GCTTTTCCCA AGGCAGTCTG  
 GAGCATGCGC TTTAGCAGCC CCGCTGGGCA CTTGGCGCTA CACAAGTGGC CTCTGGCCTC GCACACATTC  
 CACATCCACC GGTAGGCGCC AACCGACTCC GTTCTTTGGT GGCCCTTCG GCCACCTTC TACTCCTCCC  
 CTAGTCAGGA AGTTCSCCCC CGCCCGCAG CTCGCGTCTG GCAGGACGTG ACAAATGGAA GTAGCACGTC  
 TCACTAGTCT CGTGCAGATG GACAGCACCG CTGAGCAATG GAAGCGGGTA GGCCTTTGGG GCAGCGGCCA  
 ATAGCAGCTT TGCTCCTTCG CTTTCTGGGC TCAGAGGCTG GGAAGGGGTG GGTCCGGGGG CGGGCTCAGG  
 GGCGGGCTCA GGGGCGGGGC GGGCGCCCGA AGGTCTCCG GAGGCCCGGC ATTCTGCACG CTTCAAAGC  
 GCACGTCTGC CGCGCTGTTT TCCTCTTCTT CATCTCCGGG CCTTTCGACC TGCATCCATC TAGATCTCGA  
 GCAGCTGAAG CTTACCATGA CCGAGTACAA GCCACGGTG CGCCTCGCCA CCCGCGACGA CGTCCCAGG  
 GCCGTACGCA CCCTCGCCGC CGGTTCCGCC GACTACCCCG CCACGCGCCA CACCGTCGAT CCGGACCGCC  
 ACATCGAGCG GGTACCCGAG CTGCAAGAAC TTTCTCACG GCGCGTCGGG CTCGACATCG GCAAGGTGTG  
 GGTGCGGAC GACGGCGCCG CGGTGGCGGT CTGGACCACG CCGGAGAGCG TCGAAGCGGG GCGCGTGTTC  
 GCCGAGATCG GCCCGCGCAT GGCCGAGTTG AGCGGTTCCC GGCTGGCCGC GCAGCAACAG ATGGAAGGCC  
 TCCTGGCGCC GCACCGGCC AAGGAGCCCG CGTGGTTCTT GGCCACCGTC GGCGTCTCGC CCGACCACCA  
 GGGCAAGGGT CTGGGACGCG CCGTCGTGCT CCCCAGGAGT GAGGCGGCGG AGCGCGCCGG GGTGCCCGCC  
 TTCTGGAGA CTTCCGCGCC CCAACAACCTC CCCTTCTACG AGCGGCTCGG CTTACCGTC ACCGCCGACG  
 TCGAGGTGCC CGAAGGACCG CGCACCTGGT GCATGACCCG CAAGCCCGGT GCCTGACGCC CGCCCCACGA  
 CCCGACGCGC CCGACCGAAA GGAGCGCACG ACCCATGCA TCGATGATAT CAGATCCCGG GGATGCAGAA  
 ATTGATGATC TATTAACAA TAAAGATGTC CACTAAAATG GAAGTTTTTC CTGTCATATC TTGTTAAGAA  
 GGGTGAGAAC AGAGTACCTA CATTTTGAAT GGAAGGATTG GAGTACGGG GGTGGGGGTG GGTGGGATT  
 AGATAAATGC CTGCTCTTTA CTGAAGGCTC TTTACTATTG CTTTATGATA ATGTTTCATA GTTGATATC  
 ATAATTTAAA CAAGCAAAAC CAAATTAAGG GCCAGCTCAT TCCTCCCACT CATGATCTAT AGATCTATAG  
 ATCTCTCGTG GGATCATTGT TTTTCTTTG ATTCCCCTT TGTGGTTCTA AGTACTGTGG TTTCCAAATG  
 TGTCAGTTTC ATAGCCTGAA GAACGAGATC AGCAGCCTCT GTTCCACATA CACTTCATTC TCAGTATTGT  
 TTTGCCAAGT TCTAATTCCA TCAGAAGCTG GTCGAGATCC GGAACCCTTA ATATAACTTC GTATAATGTA  
 TGCTATACGA AGTTATTAGG TCCCTCGAAG AGTTCACTA GCGCGCCAC **AGACCGTTCC** **GGATTAAGAC**  
**CAGCCGATT** **TGGCCTGCGG** **GATAGGGGAC** **AGCAGGAGGA** **AGGCCGCGGG** **CAGGCTGATC** **CGGGCCGGGG**  
**TGGCGGGCGG** **CTCTGGCTG** **CGGCCGTTGC** **TGAGAGACGG** **GCGGCCTCT** **CTGTGGGGT** **GACTTGGCAT**  
**GTAGGCTTTG** **GGTCCATGA** **AGGCTGCGG** **CCTCCTTAA** **GTGGAATCGG** **TCACCTGCCT** **ACCACGAGGG**  
**GACCGGTAGT** **CCTAGGTCTG** **AGCGTCTGGC** **CCCCGGGGCG** **CGTGGAGGCC** **CTGAGACTCG** **GAGGTGGCGC**  
**CGGGACCCGC** **CCAGATGTTG** **CGTTTCTACC** **TTTGTGCTA** **GTTGTGCTCG** **GCCGTCCCCA** **CGCCCTCTG**  
**GAGGGTCTCG** **AGTGATTCT** **TGGCCTTCT** **TGGCCTCATA** **CCCGCCTTCG** **GCTGCAGTGT** **TTGTCAGCA**

GTTCTGGGGA CCTGCTTACA TGAATTTCTT GGAAGGACTC AGGCTGTCTT CTAATCCTGA CGGTCGCAAA  
 GGAGACTGAT TGTTTACTTT AGCATTGTGT CATTGGGCGC ACCTTGCCTC TTTTGTCTCG CCATTGATAA  
 AATCCAAGTA TTTGACTTAC GAAGAGACCA CTGACTGACT GACTGGAAAG AAGGGCTGGA AGAGGAAGGA  
 GCTTGGCGTA ATCATGGTCA TAGCTGT TTC CTGTGTGAAA TTGTTATCCG CTCACAATTC CACACAACAT  
 ACGAGCCGGA AGCATAAAGT GTAAAGCCTG GGGTGCCTAA TGAGTGAGCT AACTCACATT AATTGCGTTG  
 CGTCACTGC CCGCTTTCCA GTCGGGAAAC CTGTCTGTCC AGCTGCATTA ATGAATCGGC CAACGCGCGG  
 GGAGAGGCGG TTTGCGTATT GGGCGCTCTT CCGCTTCTCT GCTCACTGAC TCGCTGCGCT CGGTCTGTTG  
 GCTGCGGCGA GCGGTATCAG CTCACTCAA GCGGTAATA CGGTTATCCA CAGAATCAGG GGATAACGCA  
 GGAAGAACA TGTGAGCAA AGGCCAGCAA AAGGCCAGGA ACCGTAAAAA GGCCGCGTTG CTGGCGTTTT  
 TCCATAGGCT CCGCCCCCT GACGAGCATC ACAAAAATCG ACGCTCAAGT CAGAGGTGGC GAAACCCGAC  
 AGGACTATAA AGATACCAGG CGTTTCCCC TGGAAAGCTC CTCGTGCGCT CTCCTGTTCC GACCCTGCCG  
 CTTACCGGAT ACCTGTCCGC CTTTCTCCCT TCGGGAAGCG TGGCGCTTTC TCATAGCTCA CGCTGTAGGT  
 ATCTCAGTTC GGTGTAGGTC GTTCGCTCCA AGCTGGGCTG TGTGCACGAA CCCCCGTTT AGCCCGACCG  
 CTGCGCCTTA TCCGTAAGT ATCGTCTGA GTCCAACCG GTAAGACACG ACTTATCGCC ACTGGCAGCA  
 GCCACTGGTA ACAGGATTAG CAGAGCGAGG TATGTAGCGG GTGCTACAGA GTTCTTGAAG TGGTGGCCTA  
 ACTACGGCTA CACTAGAAGA ACAGTATTG GTATCTGCGC TCTGCTGAAG CCAGTTACCT TCGGAAAAAG  
 AGTTGGTAGC TCTTGATCCG GCAACAAC CACCGCTGGT AGCGGTGGTT TTTTGTGTTG CAAGCAGCAG  
 ATTACGCGCA GAAAAAAGG ATCTCAAGAA GATCCTTTGA TCTTTTCTAC GGGGTCTGAC GCTCAGTGGA  
 ACGAAAATC ACGTTAAGG ATTTTGGTCA TGAGATTATC AAAAAGGATC TTCACCTAGA TCCTTTTAAA  
 TAAAAATGA AGTTTTAAAT CAATCTAAG TATATATGAG TAAACTTGGT CTGACAGTTA CCAATGCTTA  
 ATCAGTGAGG CACCTATCTC AGCGATCTGT CTATTTGCTT CATCCATAGT TGCCTGACTC CCCGTCGTGT  
 AGATAACTAC GATACGGGAG GGCTTACCAT CTGGCCCCAG TGCTGCAATG ATACCGCGAG AACACGCTC  
 ACCGGCTCCA GATTTATCAG CAATAAACCA GCCAGCCGGA AGGGCCGAGC GCAGAAGTGG TCCTGCAACT  
 TTATCCGCCT CCATCCAGTC TATTAATTGT TGCCGGGAAG CTAGAGTAAG TAGTTCGCCA GTTAATAGTT  
 TGCGCAACGT TGTGCCATT GCTACAGGCA TCGTGGTGTC ACGCTCGTCG TTTGGTATGG CTTTCATTACG  
 CTCCGTTCC CAACGATC

**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\\_018206](#)

**UniProt ID:**

[Q96QK1](#)

**Synonyms:**

MEM3; PARK17

**Summary:**

This gene belongs to a group of vacuolar protein sorting (VPS) genes. The encoded protein is a component of a large multimeric complex, termed the retromer complex, involved in retrograde transport of proteins from endosomes to the trans-Golgi network. The close structural similarity between the yeast and human proteins that make up this complex suggests a similarity in function. Expression studies in yeast and mammalian cells indicate that this protein interacts directly with VPS35, which serves as the core of the retromer complex. [provided by RefSeq, Jul 2008]

Product images:

