OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for KN211578

Galactosylceramidase (GALC) 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: Galactosylceramidase

Locus ID: 2581

Components: **KN211578G1**, Galactosylceramidase gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CTGGTGGAGCACTTTAACGC
KN211578G2, Galactosylceramidase gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGGATTCCAAGGTCCGCCAA
KN211578D, 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 TGGCCGCAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTC TGAGAATAGT GTATGCGGCG
ACCGAGTTGC TCTTGCCCGG CGTCAATACG GGATAATACC GCGCCACATA GCAGAACTTT AAAAGTGCTC
ATCATTGGAA AACGTTCTTC GGGGCGAAAA CTCTCAAGGA TCTTACCGCT GTTGAGATCC AGTTCGATGT
AACCCACTCG TGCACCCAAC TGATCTTCAG CATCTTTTAC TTTCACCAGC GTTTCTGGGT GAGCAAAAAC
AGGAAGGCAA AATGCCGCAA AAAAGGGAAT AAGGGCGACA CGGAAATGTT GAATACTCAT ACTCTTCCTT
TTTCAATATT ATTGAAGCAT TTATCAGGGT TATTGTCTCA TGAGCGGATA CATATTTGAA TGTATTTAGA
AAAATAAACA AATAGGGGTT CCGCGCACAT TTCCCCGAAA AGTGCCACCT GACGTCTAAG AAACCATTAT
TATCATGACA TTAACCTATA AAAATAGGCG TATCACGAGG CCCTTTCGGG TCGCGCGTTT CGGTGATGAC
GGTGAAAACC TCTGACACAT GCAGCTCCCG TTGACGGTCA CAGCTTGTCT GTAAGCGGAT GCCGGGAGCA
GACAAGCCCG TCAGGGCGCG TCAGCGGGTG TTGGCGGGTG TCGGGGCTGG CTTAACTATG CGGCATCAGA
GCAGATTGTA CTGAGAGTGC ACCATAAAAT TGTAAACGTT AATATTTTGT TAAAATTCGC GTTAAATTTT
TGTTAAATCA GCTCATTTTT TAACCAATAG GCCGAAATCG GCAAAATCCC TTATAAATCA AAAGAATAGC
CCGAGATAGG GTTGAGTGTT GTTCCAGTTT GGAACAAGAG TCCACTATTA AAGAACGTGG ACTCCAACGT
CAAAGGGCGA AAAACCGTCT ATCAGGGCGA TGGCCCACTA CGTGAACCAT CACCCAAATC AAGTTTTTTG
GGGTCGAGGT GCCGTAAAGC ACTAAATCGG AACCCTAAAG GGAGCCCCCG ATTTAGAGCT TGACGGGGAA
AGCCGGCGAA CGTGGCGAGA AAGGAAGGGA AGAAAGCGAA AGGAGCGGGC GCTAGGGCGC TGGCAAGTGT
AGCGGTCACG CTGCGCGTAA CCACCACACC CGCCGCGCTT AATGCGCCGC TACAGGGCGC GTACTATGGT
TGCTTTGACG TATGCGGTGT GAAATACCGC ACAGATGCGT AAGGAGAAAA TACCGCATCA GGCGCCATTC
GCCATTCAGG CTGCGCAACT GTTGGGAAGG GCGATCGGTG CGGGCCTCTT CGCTATTACG CCAGCTGGCG
AAAGGGGGAT GTGCTGCAAG GCGATTAAGT TGGGTAACGC CAGGGTTTTC CCAGTCACGA CGTTGTAAAA
CGACGGCCAG TGAATTGGAG GCTACAGTCA GTGGAGAGGA CTTTCACTGA CTGACTGACT GCGTCTCAAC
```

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2022 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

View online »

CTAGCAGTTA AGAGCCAATT GCTTATAGAG TGAAATGGAC AAAAAATAGT AGTTGTGAAA CATGATAAGG
CGAAGGGGCT TGGGGTAAAG AAGCGACTAG AAAGATAGGG ATTAACAAAT TTTGTTTGGA CAGATTTCCC
TCGACTTCAA CTTTCTGTCC TTGAAGATAA CAATGTTATT TTATAGGGAA GACATCTTTC ACATGGGAAT
TTCATCTCCT CCTTTTAAGA CACATAATAT CCATGACAGT GATCTTGCAC CTGCTGTTTT TAAGTGCCTT
TAATTTAAAA TAGTCAATAT GCCACAGCAG CATATTTTGA GGTGGTATAT TATTAACTCC TTCAAGGCTA
AAAGCTTTGA ATATGCCGGG GTAGTTACCA GACTGGAGAA CCTTCTCAGC TATTTGCCAC TTGTGGAATG
CATTCAAATG TACTGAGTGC TTATTAACTT TTCTCTCAGT CCCTCACTCT GCTGCTCTTC TCGCCTCATC
TCACATAAGG GAAAACTCAG GCTCCAAAAG CAAAGTGATT CCACCAAGAT GACAATGGAA TCGGGACCTG
GTGTCCAAGC CTGGTCCTCG CACGAGGTAG ATACTCCCTG AGACTAGCAT GGAGAGCGAC GAGAGCGGCC
TGCCCGCCAT GGAGATCGAG TGCCGCATCA CCGGCACCCT GAACGGCGTG GAGTTCGAGC TGGTGGGCGG
CGGAGAGGGC ACCCCCGAGC AGGGCCGCAT GACCAACAAG ATGAAGAGCA CCAAAGGCGC CCTGACCTTC
AGCCCCTACC TGCTGAGCCA CGTGATGGGC TACGGCTTCT ACCACTTCGG CACCTACCCC AGCGGCTACG
AGAACCCCTT CCTGCACGCC ATCAACAACG GCGGCTACAC CAACACCCGC ATCGAGAAGT ACGAGGACGG
CGGCGTGCTG CACGTGAGCT TCAGCTACCG CTACGAGGCC GGCCGCGTGA TCGGCGACTT CAAGGTGATG
GGCACCGGCT TCCCCGAGGA CAGCGTGATC TTCACCGACA AGATCATCCG CAGCAACGCC ACCGTGGAGC
ACCTGCACCC CATGGGCGAT AACGATCTGG ATGGCAGCTT CACCCGCACC TTCAGCCTGC GCGACGGCGG
CTACTACAGC TCCGTGGTGG ACAGCCACAT GCACTTCAAG AGCGCCATCC ACCCCAGCAT CCTGCAGAAC
GGGGGCCCCA TGTTCGCCTT 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 GGCCCCTTCG CGCCACCTTC TACTCCTCCC
CTAGTCAGGA AGTTCCCCCC CGCCCCGCAG CTCGCGTCGT GCAGGACGTG ACAAATGGAA GTAGCACGTC
TCACTAGTCT CGTGCAGATG GACAGCACCG CTGAGCAATG GAAGCGGGTA GGCCTTTGGG GCAGCGGCCA
ATAGCAGCTT TGCTCCTTCG CTTTCTGGGC TCAGAGGCTG GGAAGGGGTG GGTCCGGGGG CGGGCTCAGG
GGCGGGCTCA GGGGCGGGGC GGGCGCCCGA AGGTCCTCCG GAGGCCCGGC ATTCTGCACG CTTCAAAAGC
GCACGTCTGC CGCGCTGTTC TCCTCTTCCT CATCTCCGGG CCTTTCGACC TGCATCCATC TAGATCTCGA
GCAGCTGAAG CTTACCATGA CCGAGTACAA GCCCACGGTG CGCCTCGCCA CCCGCGACGA CGTCCCCAGG
GCCGTACGCA CCCTCGCCGC CGCGTTCGCC GACTACCCCG CCACGCGCCA CACCGTCGAT CCGGACCGCC
ACATCGAGCG GGTCACCGAG CTGCAAGAAC TCTTCCTCAC GCGCGTCGGG CTCGACATCG GCAAGGTGTG
GGTCGCGGAC GACGGCGCCG CGGTGGCGGT CTGGACCACG CCGGAGAGCG TCGAAGCGGG GGCGGTGTTC
GCCGAGATCG GCCCGCGCAT GGCCGAGTTG AGCGGTTCCC GGCTGGCCGC GCAGCAACAG ATGGAAGGCC
TCCTGGCGCC GCACCGGCCC AAGGAGCCCG CGTGGTTCCT GGCCACCGTC GGCGTCTCGC CCGACCACCA
GGGCAAGGGT CTGGGCAGCG CCGTCGTGCT CCCCGGAGTG GAGGCGGCCG AGCGCGCCGG GGTGCCCGCC
TTCCTGGAGA CCTCCGCGCC CCACAACCTC CCCTTCTACG AGCGGCTCGG CTTCACCGTC ACCGCCGACG
TCGAGGTGCC CGAAGGACCG CGCACCTGGT GCATGACCCG CAAGCCCGGT GCCTGACGCC CGCCCCACGA
CCCGCAGCGC CCGACCGAAA GGAGCGCACG ACCCCATGCA TCGATGATAT CAGATCCCCG GGATGCAGAA
ATTGATGATC TATTAAACAA TAAAGATGTC CACTAAAATG GAAGTTTTTC CTGTCATACT TTGTTAAGAA
GGGTGAGAAC AGAGTACCTA CATTTTGAAT GGAAGGATTG GAGCTACGGG GGTGGGGGTG GGGTGGGATT
AGATAAATGC CTGCTCTTTA CTGAAGGCTC TTTACTATTG CTTTATGATA ATGTTTCATA GTTGGATATC
ATAATTTAAA CAAGCAAAAC CAAATTAAGG GCCAGCTCAT TCCTCCCACT CATGATCTAT AGATCTATAG
ATCTCTCGTG GGATCATTGT TTTTCTCTTG ATTCCCACTT TGTGGTTCTA AGTACTGTGG TTTCCAAATG
TGTCAGTTTC ATAGCCTGAA GAACGAGATC AGCAGCCTCT GTTCCACATA CACTTCATTC TCAGTATTGT
TTTGCCAAGT TCTAATTCCA TCAGAAGCTG GTCGAGATCC GGAACCCTTA ATATAACTTC GTATAATGTA
TGCTATACGA AGTTATTAGG TCCCTCGAAG AGGTTCACTA GGCGCGCCAG CAGTAAGTAC ATGTGAAATC
CAGTAGCTGA CCACAGACAC GCGAGCGATA AGAAAAAGCT CGCTGCTTCT TTTCTCAACA CTCCGCCAGC
TGCGTCAGAG GCCCTTGACC CGCACTCAAA ATGGCGGCGG CGGCGTCAGC ATCAGCGGCC TCCTGCCCGT
ATCTATCGTG GCGGCGACGG GACCCGCCTC CCTGGGCGCC GGAGTCATGT GACCCACACA ATGGCTGAGT
GGCTACTCTC GGCTTCCTGG CAACGCCGAG CGAAAGCTAT GACTGCGGCC GCGGGTTCGG CGGGCCGCGC
CGCGGTGCCC TTGCTGCTGT GTGCGCTGCT GGCGCCCGGC GGCGCGTACG TGCTCGACGA CTCCGACGGG
CTGGGCCGGG AGTTCGACGG CATCGGCGCG GTCAGCGGCG GCGGGGTGAG CGGCAAGCTG CGGGGATACG

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2022 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

CGGGGGGCGG CAAGAGCCCG CCCCGTGGGG CCAGCCCCAC AAGCCCCCGC GGCGTTGCCC TGCGTTTCCA
CCGGCTCCAC TCTCCGCCGC ATTCCCCTAG GGTGCCAGTC AGCAGGCGGT TGGGGCGGGC CCGCTGCGGG
GCTGGGGCGG GTGCTTTCAC GAAGAGACGA CTGACTGACT GACTGGAAAG GAAGGGCTGG AAGAGGAAGG
AGCTTGGCGT AATCATGGTC ATAGCTGTTT CCTGTGTGAA ATTGTTATCC GCTCACAATT CCACACAACA
TACGAGCCGG AAGCATAAAG TGTAAAGCCT GGGGTGCCTA ATGAGTGAGC TAACTCACAT TAATTGCGTT
GCGCTCACTG CCCGCTTTCC AGTCGGGAAA CCTGTCGTGC CAGCTGCATT AATGAATCGG CCAACGCGCG
GGGAGAGGCG GTTTGCGTAT TGGGCGCTCT TCCGCTTCCT CGCTCACTGA CTCGCTGCGC TCGGTCGTTC
GGCTGCGGCG AGCGGTATCA GCTCACTCAA AGGCGGTAAT ACGGTTATCC ACAGAATCAG GGGATAACGC
AGGAAAGAAC ATGTGAGCAA AAGGCCAGCA AAAGGCCAGG AACCGTAAAA AGGCCGCGTT GCTGGCGTTT
TTCCATAGGC TCCGCCCCCC TGACGAGCAT CACAAAAATC GACGCTCAAG TCAGAGGTGG CGAAACCCGA
CAGGACTATA AAGATACCAG GCGTTTCCCC CTGGAAGCTC CCTCGTGCGC TCTCCTGTTC CGACCCTGCC
GCTTACCGGA TACCTGTCCG CCTTTCTCCC TTCGGGAAGC GTGGCGCTTT CTCATAGCTC ACGCTGTAGG
TATCTCAGTT CGGTGTAGGT CGTTCGCTCC AAGCTGGGCT GTGTGCACGA ACCCCCCGTT CAGCCCGACC
GCTGCGCCTT ATCCGGTAAC TATCGTCTTG AGTCCAACCC GGTAAGACAC GACTTATCGC CACTGGCAGC
AGCCACTGGT AACAGGATTA GCAGAGCGAG GTATGTAGGC GGTGCTACAG AGTTCTTGAA GTGGTGGCCT
AACTACGGCT ACACTAGAAG AACAGTATTT GGTATCTGCG CTCTGCTGAA GCCAGTTACC TTCGGAAAAA
GAGTTGGTAG CTCTTGATCC GGCAAACAAA CCACCGCTGG TAGCGGTGGT TTTTTTGTTT GCAAGCAGCA
GATTACGCGC AGAAAAAAAG GATCTCAAGA AGATCCTTTG ATCTTTTCTA CGGGGTCTGA CGCTCAGTGG
AACGAAAACT CACGTTAAGG GATTTTGGTC ATGAGATTAT CAAAAAGGAT CTTCACCTAG ATCCTTTTAA
ATTAAAAATG AAGTTTTAAA TCAATCTAAA GTATATATGA GTAAACTTGG TCTGACAGTT ACCAATGCTT
AATCAGTGAG GCACCTATCT CAGCGATCTG TCTATTTCGT TCATCCATAG TTGCCTGACT CCCCGTCGTG
TAGATAACTA CGATACGGGA GGGCTTACCA TCTGGCCCCA GTGCTGCAAT GATACCGCGA GAACCACGCT
CACCGGCTCC AGATTTATCA GCAATAAACC AGCCAGCCGG AAGGGCCGAG CGCAGAAGTG GTCCTGCAAC
TTTATCCGCC TCCATCCAGT CTATTAATTG TTGCCGGGAA GCTAGAGTAA GTAGTTCGCC AGTTAATAGT
TTGCGCAACG TTGTTGCCAT TGCTACAGGC ATCGTGGTGT CACGCTCGTC GTTTGGTATG GCTTCATTCA
GCTCCGGTTC CCAACGATC

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_000153, NM_001037525, NM_001201401, NM_001201402

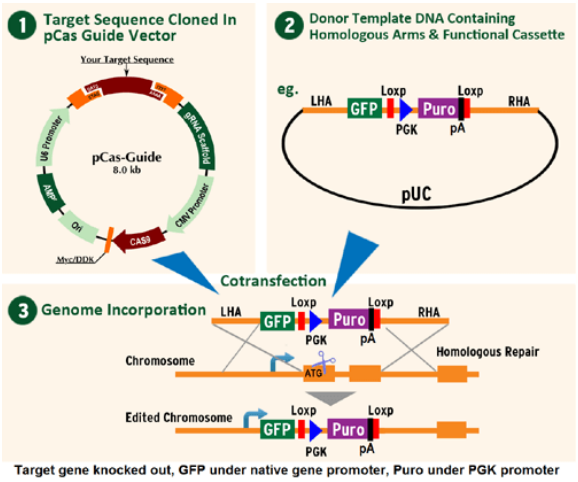
UniProt ID: P54803

Synonyms: galactocerebrosidase; galactocerebroside beta-galactosidase; galactosylceramidase; galactosylceramide beta-galactosidase; galactosylceraminidase; GALCERase; OTTHUMP00000027906

Summary: This gene encodes a lysosomal protein which hydrolyzes the galactose ester bonds of galactosylceramide, galactosylsphingosine, lactosylceramide, and monogalactosyldiglyceride. Mutations in this gene have been associated with Krabbe disease, also known as globoid cell leukodystrophy. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2022 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

Product images:



Target gene knocked out, GFP under native gene promoter, Puro under PGK promoter

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.
©2022 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US