

Product datasheet for **KN205911**

Glypican 3 (GPC3) 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: Glypican 3
Locus ID: 2719
Components: **KN205911G1**, Glypican 3 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCACGCGGTGCGCACGGTCC
KN205911G2, Glypican 3 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CAGCTTGACTTCCCGGGAC
KN205911D, 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**

```
GATCGTTGGG AACCGGAGCT GAATGAAGCC ATACCAAACG ACGAGCGTGA CACCACGATG CCTGTAGCAA
TGGCAACAAC GTTGCACAAA CTATTAACCTG GCGAACTACT TACTCTAGCT TCCCAGCAAC AATTAATAGA
CTGGATGGAG GCGGATAAAG TTGCAGGACC ACTTCTGCGC TCGGCCCTTC CGGCTGGCTG GTTTATTGCT
GATAAATCTG GAGCCGGTGA GCGTGGTTCT CGCGGTATCA TTGCAGCACT GGGGCCAGAT GGTAAGCCCT
CCCGTATCGT AGTTATCTAC ACGACGGGGA GTCAGGCAAC TATGGATGAA CGAAATAGAC AGATCGCTGA
GATAGGTGCC TCACTGATTA AGCATTGGTA ACTGTACAGC CAAGTTTACT CATATATACT TTAGATTGAT
TTAAAACCTC ATTTTAAATT TAAAAGGATC TAGGTGAAGA TCCTTTTTGA TAATCTCATG ACCAAAATCC
CTTAACGTGA GTTTTCGTTC CACTGAGCGT CAGACCCCGT AGAAAAGATC AAAGGATCTT CTTGAGATCC
TTTTTTCTG CGCGTAATCT GCTGCTTGCA AACAAAAAAA CCACCGCTAC CAGCGGTGGT TTGTTTGCCG
GATCAAGAGC TACCAACTCT TTTTCCGAAG GTAAGTGGCT TCAGCAGAGC GCAGATACCA AATACTGTTC
TTCTAGTGTA GCCGTAGTTA GGCCACCACT TCAAGAAGCT TGTAGCACCG CCTACATACC TCGCTCTGCT
AATCCTGTTA CCAGTGGCTG CTGCCAGTGG CGATAAGTCG TGTCTTACCG GGTGGACTC AAGACGATAG
TTACCGGATA AGGCGCAGCG GTCGGGCTGA ACGGGGGGTT CGTGACACACA GCCCAGCTTG GAGCGAACGA
CCTACACCGA ACTGAGATAC CTACAGCGTG AGCTATGAGA AAGCGCCACG CTCCCGAAG GGAGAAAGGC
GGACAGGTAT CCGGTAAGCG GCAGGGTCCG AACAGGAGAG CGCACGAGGG AGCTTCCAGG GGGAAACGCC
TGGTATCTTT ATAGTCCTGT CCGGTTTCGC CACCTCTGAC TTGAGCGTCG ATTTTGTGA TGCTCGTCAG
GGGGGCGGAG CCTATGGAAA AACGCCAGCA ACGCGGCCTT TTTACGGTTC CTGGCCTTTT GCTGGCCTTT
TGCTCACATG TTCTTCTCTG CGTTATCCCC TGATTCTGTG GATAACCGTA TTACCGCCTT TGAGTGAGCT
GATACCGCTC GCCGCAGCCG AACGACCGAG CGCAGCGAGT CAGTGAGCGA GGAAGCGGAA GAGCGCCCAA
TACGCAAACC GCCTCTCCCC GCGCGTTGGC CGATTTCATTA ATGCAGCTGG CACGACAGGT TTCCCAGCTG
GAAAGCGGGC AGTGAGCGCA ACGCAATTAA TGTGAGTTAG CTCACTCATT AGGCACCCCA GGCTTTACAC
TTTATGCTTC CGGCTCGTAT GTTGTGTGGA ATTGTGAGCG GATAACAATT TCACACAGGA AACAGCTATG
ACCATGATTA CGCCAAGCTC CTTCTCTTTC CAGCCCTTCC TCTTCTACTG ACTGACTGAC TGGAAGACAC
```



[View online »](#)

ACCTAAAGGG AAAAGCCCTC CAGGCTGTAG GCCAATGAGC GCGGGAAGG AGGAGTGAGG CTGGGGAAC
 TCTCCAGAG CCAGTCAGAG CCGACGGCTG CTGGGAAGCC AATCAGCGCG CTCGAGCCTG CAGCCCTCT
 GCAGTAGTTA TGCCAGAGCG CCCTGTGTAG AGCGGCTGCG AGCGGGCAGC TGGGCTCGGC TGCCGGGAGC
 CACCGCGCGG GCTCCGACC CTCCTCTCGC ACTGCCTTCG CCCGGTCCCC GCGCCGCGGT GCCCCAGTGG
 CCCCCGCCG GCTCCACGCC GCGCCCCCG ACCCCGCCGG CTACCGGCCG CACAACCGCC ACCGCCCTCT
 GGCCGCGCGG CTCGCTCGC CCCGCCCGT CCCTCTCTCG CCCGCCAC CCCAGTCAGC CCCGCCCTGC
 CCGCGCGCG CAAGCGTTC CCGCCCTCGC CCAGCCCGCA GGTAGCTGCG AGGAACTTT TGCAGCGGCT
 GGGTAGCAGC ACGTCTCTTG CTCTCAGGG CCACTGCCAG GCTTGCCGAG TCTTGGGACT GCTCTCGCTC
 CGGCTGCCAC TCTCCGCGC TCTCTAGCT CCCTGCGAAG CAGGACTAGC ATGGAGAGCG ACGAGAGCGG
 CCTGCCCGCC ATGGAGATCG AGTGCCGCAT CACCGGCACC CTGAACGGCG TGGAGTTCGA GCTGGTGGGC
 GCGGAGAGG GCACCCCGA GCAGGGCCG ATGACCAACA AGATGAAGAG CACCAAAGG GCCCTGACCT
 TCAGCCCTA CTTGCTGAGC CACGTGATGG GCTACGGCTT CTACCACTTC GGCACCTACC CCAGCGGCTA
 CGAGAACCC TTCCTGCACG CCATCAACAA CGGCGGCTAC ACCAACACCC GCATCGAGAA GTACGAGGAC
 GCGGCGTGC TGCACGTGAG CTTGAGCTAC CGCTACGAGG CCGGCCGCGT GATCGGCGAC TTCAAGGTGA
 TGGCACCAGG CTTCCCGAG GACAGCGTGA TCTTACCGA CAAGATCATC CGCAGCAACG CCACCGTGGG
 GCACCTGCAC CCCATGGGCG ATAACGATCT GGATGGCAGC TTCACCGCA CCTTCAGCCT GCGCGACGGC
 GGCTACTACA GCTCCGTGGT GGACAGCCAC ATGCACTTCA AGAGCGCCAT CCACCCAGC ATCCTGCAGA
 ACGGGGGCC CATGTTCCGC TTCGCGCGG TGGAGGAGGA TCACAGCAAC ACCGAGCTGG GCATCGTGGG
 GTACCAGCAC GCCTTCAAGA CCCCGGATGC AGATGCCGTG GAAGAAAGAG TTTAAGAATT CCGATCATAT
 TCAATAACCC TTAATATAAC TTCGTATAAT GTATGCTATA CGAAGTTATT AGGTCTGAAG AGGAGTTTAC
 GTCCAGCAA GCTTAGGATC TCGACCTCGA AATTCTACCG GGTAGGGGAG GCGCTTTTCC CAAGGCAGTC
 TGGAGCATGC GCTTAGCAG CCCCCTGCG ACTTGGCGCT ACACAAGTGG CCTCTGGCTC CGCACACATT
 CCACATCCAC CGGTAGCGCC AACCGGCTCC GTTCTTTGGT GGCCCTTCG GCCACCTTC TACTCTCCC
 CTAGTCAGGA AGTTCACCC CGCCCGCAG CTCGCGTGTG GCAGGACGTG ACAAATGGAA GTAGCAGGTC
 TCACTAGTCT CGTGCAAGT GACAGCACCG CTGAGCAATG GAAGCGGTA GGCCTTTGGG GCAGCGCCA
 ATAGCAGCTT TGCTCTTCG CTTTCTGGG TCAGCAGCTG GGAAGGGTGG GTCCGGGGG GGGCTCAGGG
 GCGGGCTCAG GGGCGGGCG GCGCCCGAA GGTCTCCGG AGGCCCGCA TTCTGCACG TTTAAAAGCG
 CACGTCTGCC GCGCTGTTCT CCTTCTCCT ATCTCCGGG CTTTGCACCT GCATCCATCT AGATCTCAG
 CAGCTGAAGC TTACCATGAC CGAGTACAAG CCCACGGTGC GCCTCGCCAC CCGCGACGAC GTCCCCAGG
 CCGTACGCAC CCTCGCCGC GCGTTCGCG ACTACCCCG CACGCGCCAC ACCGTCGATC CGGACCGCA
 CATCGAGCGG GTCACCGAGC TGCAAGAACT CTTCTCAGC CCGCTCGGG TCGACATCGG CAAGGTGTGG
 GTCGCGGAGC ACGCGCGCG GGTGGCGGTC TGGACCAGC CCGAGAGCGT CGAAGCGGG GCGGTGTTCC
 CCGAGATCGG CCCGCGCATG GCCGAGTTGA GCGGTTCCCG GCTGGCCGCG CAGCAACAGA TGAAGGCCT
 CCTGGCGCG CACCGGCCA AGGAGCCCG GTGGTTCCTG GCCACCGTC GCGTCTCGCC CGACCACCAG
 GGCAAGGGTC TGGGAGCGC CGTCGTGCTC CCCGAGTGG AGGCGGCCA GCGCGCCGG GTGCCCGCT
 TCCTGGAGAC CTCGCGGCC CACAACCTCC CTTTCTACGA GCGGCTCGG TTCACCGTCA CCGCCGACGT
 CGAGGTGCC GAAGGACCG GCACCTGGTG CATGACCCG AAGCCCGTG CCTGACGCC GCCCCACGAC
 CCGCAGCGCC CGACCGAAAG GAGCGCACGA CCCATGCAT CGATGATATC AGATCCCCG GATGCAGAAA
 TTGATGATCT ATTAACAAT AAAGATGTC ACTAAAATG AAGTTTTTCC TGTCACTATT TGTTAAGAAG
 GGTGAGAACA GAGTACCTAC ATTTTGAATG GAAGGATTGG AGCTACGGG GTGGGGTGG GGTGGGATTA
 GATAAATGCC TGCTCTTAC TGAAGGCTCT TTAATATTG TTTATGATAA TGTTTATAG TTGGATATCA
 TAATTTAAC AAGCAAAACC AAATTAAGG CCAGCTCATT CCTCCACTC ATGATCTATA GATCTATAGA
 TCTCTCGTG GATCATTGTT TTTCTCTGA TTCCACTTT GTGGTTCTAA GACTGTGGT TTCAAATGT
 GTCAGTTTCA TAGCCTGAAG AACGAGATCA GCAGCCTCTG TTCCACATAC ACTTCATTCT CAGTATTGTT
 TTGCCAAGTT CTAATTCAT CAGAAGCTGG TCGAGATCCG GAACCCTAA TATAACTTC TATAATGTAT
 GCTATACGAA GTTATTAGT CCCTCGAAGA GGTTCACTAG GCGCGCCAG CCCCGCGCC GCCCGCGAC
 GCCACCTGTC ACCAAGTCCG CTCCTTCTC CAGAGACTGC AGCCCGGACT CAAGTGGGTG CCAGAAACTC
 CCGTGCCAGG TGAGGAGGG TCCCTGAGC GTGCCTAGCG CCCAGCGGG AGCAAGGCG CCGTGGTGGC
 TGTACCCTGA GCGCGTAGC CCCGCCGGG TGTAGTCGTG CGCCCTGCAG CTGGGCACTT GGGAGTGGTC
 GGTGTGCCTG GGGCCTGGCT GGGTCTACTG AGGGAGGGAG AGAGGGTGTG TGTGGACGGA GCCCACATCC
 CCCAGTCTCA CGCTGCTGC AGGGAAGGTG TGAGCGGGAG GAACCGTGG GATCGCCTTC TCGTGAGCGC
 CCGTTTTTTG GAAGGGCGAG AAGGTGGGAG CTATTTTCC GGTCTCTGC GAACTGGCG CCCACAGCCG

```

AGCTGGTGCC TCATGAATTT GCCATCCTTG CTCGCACATA CGTGTCAGAA TTTCAGCCTT AGCTGGACCA
CAGCTCCAGC CATCCCTTCC CCAACGTACC CCCACCCCCC GCCGCCTTTA CCCAGCCTGG GTTTCCTAAG
CTCACGGGCC CAAGTGCAGC ACAGTCTTCA CTGACTGACT GACTGGAAAG TCCTCTCCAC TGACTGTAGC
CTCCAATTCA CTGGCCGTCG TTTTACAACG TCGTACTGGG GAAAACCCCTG GCGTTACCCA ACTTAATCGC
CTTGACAGCAG ATCCCCCTTT CGCCAGCTGG CGTAATAGCG AAGAGGCCCG CACCGATCGC CCTTCCCAAC
AGTTGCGCAG CCTGAATGGC GAATGGCGCC TGATGCGGTA TTTTCTCCTT ACGCATCTGT GCGGTATTTT
ACACCCGCATA CGTCAAAGCA ACCATAGTAC GCGCCCTGTA GCGGCGCATT AAGCGCGGCG GGTGTGGTGG
TTACGCGCAG CGTGACCGCT ACACTTGCCA GCGCCCTAGC GCCCGCTCCT TTCGCTTCT TCCCTCCTT
TCTCGCCACG TTCGCCGCT TTTCCCGTCA AGCTCTAAAT CGGGGGCTCC CTTTAGGGT CCGATTAGT
GCTTTACGGC ACCTCGACCC CAAAAAATT GATTTGGGTG ATGGTTCACG TAGTGGGCCA TCGCCCTGAT
AGACGGTTTT TCGCCCTTTG ACGTTGGAGT CCACGTTCTT TAATAGTGA CTCTTGTTC AAAGTGAAC
AACACTCAAC CCTATCTCGG GCTATTCTTT TGATTTATAA GGGATTTTGC CGATTTCGCG CTATTGGTTA
AAAAATGAGC TGATTTACA AAAATTTAAC GCGAATTTTA ACAAATATT AACGTTTACA ATTTTATGGT
GCACTCTCAG TACAATCTGC TCTGATGCCG CATAGTTAAG CCAGCCCGA CACCCGCCA CACCCGCTGA
CGGCCCCTGA CGGGCTTGTG TGCTCCCGC ATCCGCTTAC AGACAAGCTG TGACCGTCAA CGGGAGCTGC
ATGTGTGAGA GGTTTTACC GTCATCACCG AAACGCGCGA CCCGAAAGGG CCTCGTGATA CGCCTATTTT
TATAGGTTAA TGTCATGATA ATAATGGTTT CTTAGACGTC AGGTGGCACT TTTCCGGGAA ATGTGCGCGG
AACCCCTATT TGTTATTTT TCTAAATACA TTCAAATATG TATCCGCTCA TGAGACAATA ACCCTGATA
ATGCTTCAAT AATATTGAAA AAGGAAGAGT ATGAGTATTC AACATTTCCG TGTCGCCTT ATTCCTTTT
TTGCGGCATT TTGCCTTCT GTTTTTGCTC ACCCAGAAAC GCTGGTGAAA GTAAAAGATG CTGAAGATCA
GTTGGGTGCA CGAGTGGTT ACATCGAAGT GGATCTCAAC AGCGGTAAGA TCCTTGAGAG TTTTCGCCCC
GAAGAACGTT TTCCAATGAT GAGCACTTTT AAAGTTCTGC TATGTGGCGC GGTATTATCC CGTATTGACG
CCGGGCAAGA GCAACTCGGT CGCCGCATAC ACTATTCTCA GAATGACTTG GTTGAGTACT CACAGTCAC
AGAAAAGCAT CTTACGGATG GCATGACAGT AAGAGAATTA TGCAGTGCTG CCATAACCAT GAGTGATAAC
ACTGCGGCA ACTTACTTCT GACAACGATC GGAGGACCGA AGGAGCTAAC CGCTTTTTTG CACAACATGG
GGGATCATGT AACTCGCCTT

```

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_001164617](#), [NM_001164618](#), [NM_001164619](#), [NM_004484](#)

UniProt ID:

[P51654](#)

Synonyms:

DGSX; GTR2-2; MXR7; OCI-5; SDYS; SGB; SGBS; SGBS1

Summary:

Cell surface heparan sulfate proteoglycans are composed of a membrane-associated protein core substituted with a variable number of heparan sulfate chains. Members of the glypican-related integral membrane proteoglycan family (GRIPS) contain a core protein anchored to the cytoplasmic membrane via a glycosyl phosphatidylinositol linkage. These proteins may play a role in the control of cell division and growth regulation. The protein encoded by this gene can bind to and inhibit the dipeptidyl peptidase activity of CD26, and it can induce apoptosis in certain cell types. Deletion mutations in this gene are associated with Simpson-Golabi-Behmel syndrome, also known as Simpson dysmorphia syndrome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2009]

Product images:

