

Product datasheet for **KN307154**

Gpc1 Mouse 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: Gpc1
Locus ID: 14733
Components: **KN307154G1**, Gpc1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AGGCTGGTGGCTGCTGTGCG
KN307154G2, Gpc1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCTGGTCGTCTGCGCCCGCG
KN307154D, 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**

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 TGGGGGATCA TGTAACCTCG CTT

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_016696](#)

UniProt ID:

[Q9QZF2](#)

Synonyms:

AI462976

Summary:

Cell surface proteoglycan that bears heparan sulfate. Binds, via the heparan sulfate side chains, alpha-4 (V) collagen and participates in Schwann cell myelination (By similarity). May act as a catalyst in increasing the rate of conversion of prion protein PRPN(C) to PRNP(Sc) via associating (via the heparan sulfate side chains) with both forms of PRPN, targeting them to lipid rafts and facilitating their interaction. Required for proper skeletal muscle differentiation by sequestering FGF2 in lipid rafts preventing its binding to receptors (FGFRs) and inhibiting the FGF-mediated signaling. Binds Cu(2+) or Zn(2+) ions.[UniProtKB/Swiss-Prot Function]

Product images:

