

Product datasheet for **KN310966**

Ngly1 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: Ngly1
Locus ID: 59007
Components: **KN310966G1**, Ngly1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCATAGCTCGGCCACGGCCG
KN310966G2, Ngly1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GAGCTCTGCGTCCCCGGCCG
KN310966D, 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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 GGGGATCATG TAACTCGCCT T

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_021504](#), [NM_001362432](#), [NM_001362433](#)

UniProt ID:

[Q9J178](#)

Synonyms:

1110002C09Rik; Png1; PNGase

Summary:

Specifically deglycosylates the denatured form of N-linked glycoproteins in the cytoplasm and assists their proteasome-mediated degradation. Cleaves the beta-aspartyl-glucosamine (GlcNAc) of the glycan and the amide side chain of Asn, converting Asn to Asp. Prefers proteins containing high-mannose over those bearing complex type oligosaccharides. Can recognize misfolded proteins in the endoplasmic reticulum that are exported to the cytosol to be destroyed and deglycosylate them, while it has no activity toward native proteins. Deglycosylation is a prerequisite for subsequent proteasome-mediated degradation of some, but not all, misfolded glycoproteins.[UniProtKB/Swiss-Prot Function]

Product images:

