

## Product datasheet for **KN213341**

### GPD2 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:** GPD2  
**Locus ID:** 2820  
**Components:** **KN213341G1**, GPD2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AAAGGGACGATTCTTGTTGG  
**KN213341G2**, GPD2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCATTTCAAAAGGCAGTGAA  
**KN213341D**, 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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AAGGCGAGTT ACATGATCCC CCATGTTGTG CAAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC
AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTC TGAGAATAGT GTATGCCGGC
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TACAGGCATC GTGGTGTAC GCTCGTCGTT TGGTATGGCT TCATTCAGCT CCGGTTCCCA ACGATC

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**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\\_000408](#), [NM\\_001083112](#)

**UniProt ID:**

[P43304](#)

**Synonyms:**

GDH2; GPDM; mGPDH

**Summary:**

The protein encoded by this gene localizes to the inner mitochondrial membrane and catalyzes the conversion of glycerol-3-phosphate to dihydroxyacetone phosphate, using FAD as a cofactor. Along with GDP1, the encoded protein constitutes the glycerol phosphate shuttle, which reoxidizes NADH formed during glycolysis. Two transcript variants encoding the same protein have been found for this gene.[provided by RefSeq, Jan 2010]

Product images:

