

Product datasheet for **KN204160**

Prostaglandin dehydrogenase 1 (HPGD) 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:	Prostaglandin dehydrogenase 1
Locus ID:	3248
Components:	KN204160G1 , Prostaglandin dehydrogenase 1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGTGAACGGCAAAGTGGCGC KN204160G2 , Prostaglandin dehydrogenase 1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TAAGGGCGCCAAGGTAAGCC KN204160D , 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
ACCGAGTTGC TCTTGCCCGG CGTCAATACG GGATAATACC GCGCCACATA GCAGAATTTT AAAAGTGCTC
ATCATTGGAA AACGTTCTTC GGGGCGAAAA CTCTCAAGGA TCTTACCCTT GTTGAGATCC AGTTTCGATG
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ACTCAAAGGC GGTAATACGG TTATCCACAG AATCAGGGGA TAACGCAGGA AAGAACATGT GAGCAAAGG
CCAGCAAAG GCCAGGAACC GTAAAAAGGC CGCGTTGCTG GCGTTTTTCC ATAGGCTCCG CCCCCCTGAC
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TAAACCAGCC AGCCGGAAGG GCCGAGCGCA GAAGTGGTCC TGCAACTTTA TCCGCCTCCA TCCAGTCTAT
TAATTGTTGC CGGGAAGCTA GAGTAAGTAG TTCGCCAGTT AATAGTTTGC GCAACGTTGT TGCCATTGCT
ACAGGCATCG TGGTGTACG CTCGTCGTTT GGTATGGCTT CATTACGCTC CGTTCCCAA CGATC

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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_000860](#), [NM_001145816](#), [NM_001256301](#), [NM_001256305](#), [NM_001256306](#),
[NM_001256307](#), [NR_027332](#), [NM_001363574](#)

UniProt ID:

[P15428](#)

Synonyms:

15-PGDH; PGDH; PGDH1; PHOAR1; SDR36C1

Summary:

This gene encodes a member of the short-chain nonmetalloenzyme alcohol dehydrogenase protein family. The encoded enzyme is responsible for the metabolism of prostaglandins, which function in a variety of physiologic and cellular processes such as inflammation. Mutations in this gene result in primary autosomal recessive hypertrophic osteoarthropathy and cranioosteoarthropathy. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2009]

