

Product datasheet for **KN209482**

Hexokinase II (HK2) 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:	Hexokinase II
Locus ID:	3099
Components:	<p>KN209482G1, Hexokinase II gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AAGGTAAGTCAGCGCGGGCG</p> <p>KN209482G2, Hexokinase II gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GAAGTAGGCAAGCAGATGCG</p> <p>KN209482D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

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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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_000189](#)

UniProt ID:

[P52789](#)

Synonyms:

HKII; HXK2

Summary:

Hexokinases phosphorylate glucose to produce glucose-6-phosphate, the first step in most glucose metabolism pathways. This gene encodes hexokinase 2, the predominant form found in skeletal muscle. It localizes to the outer membrane of mitochondria. Expression of this gene is insulin-responsive, and studies in rat suggest that it is involved in the increased rate of glycolysis seen in rapidly growing cancer cells. [provided by RefSeq, Apr 2009]

Product images:

