

RESEARCH

OriGene Technologies, Inc.

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Product datasheet for KN206043LP

PFKFB3 Human Gene Knockout Kit (CRISPR)

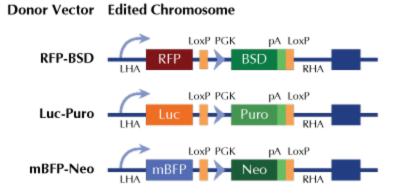
Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control
Donor DNA:	Luciferase-Puro
Symbol:	PFKFB3
Locus ID:	5209
Components:	 KN206043G1, PFKFB3 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) KN206043G2, PFKFB3 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) KN206043LPD, donor DNA containing left and right homologous arms and Luciferase-Puro functional cassette. GE100003, scramble sequence in pCas-Guide vector
RefSeq:	<u>NM 001145443, NM 001282630, NM 001314063, NM 001323016, NM 001323017, NM 001323017, NM 004566, NR 136554, NM 001363545</u>
UniProt ID:	<u>Q16875</u>
Synonyms:	iPFK-2; IPFK2; PFK2
Summary:	The protein encoded by this gene belongs to a family of bifunctional proteins that are involved in both the synthesis and degradation of fructose-2,6-bisphosphate, a regulatory molecule that controls glycolysis in eukaryotes. The encoded protein has a 6-phosphofructo-2-kinase activity that catalyzes the synthesis of fructose-2,6-bisphosphate (F2,6BP), and a fructose-2,6-biphosphatase activity that catalyzes the degradation of F2,6BP. This protein is required for cell cycle progression and prevention of apoptosis. It functions as a regulator of cyclin-dependent kinase 1, linking glucose metabolism to cell proliferation and survival in tumor cells. Several alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2016]



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Product images:



RFP, Luc, and mBFP will be under native gene promoter

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