

Product datasheet for KN206043LP

OriGene Technologies, Inc.

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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

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 001145443, NM 001282630, NM 001314063, NM 001323016, NM 001323017,

NM 004566, NR 136554, NM 001363545

UniProt ID: Q16875

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

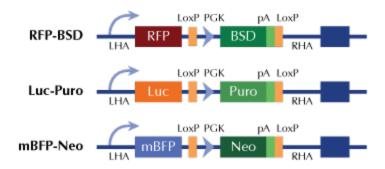
been found for this gene. [provided by RefSeq, Apr 2016]





Product images:

Donor Vector Edited Chromosome



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