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Product datasheet for KN202309RB

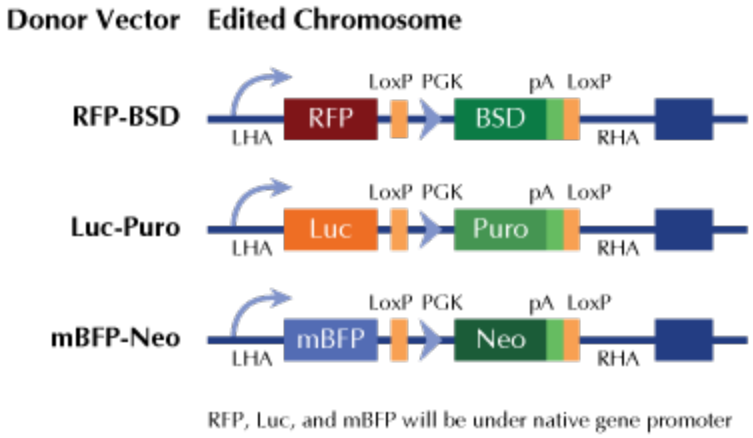
GAPDH Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control
Donor DNA:	RFP-BSD
Symbol:	GAPDH
Locus ID:	2597
Components:	**KN202309G1**, GAPDH gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) **KN202309G2**, GAPDH gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN202309RBD**, donor DNA containing left and right homologous arms and RFP-BSD functional cassette. **GE100003**, scramble sequence in pCas-Guide vector
RefSeq:	NM_001256799, NM_001289745, NM_001289746, NM_002046, NM_001357943, NR_152150
UniProt ID:	P04406
Synonyms:	G3PD; GAPD; HEL-S-162eP
Summary:	This gene encodes a member of the glyceraldehyde-3-phosphate dehydrogenase protein family. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. The product of this gene catalyzes an important energy-yielding step in carbohydrate metabolism, the reversible oxidative phosphorylation of glyceraldehyde-3-phosphate in the presence of inorganic phosphate and nicotinamide adenine dinucleotide (NAD). The encoded protein has additionally been identified to have uracil DNA glycosylase activity in the nucleus. Also, this protein contains a peptide that has antimicrobial activity against E. coli, P. aeruginosa, and C. albicans. Studies of a similar protein in mouse have assigned a variety of additional functions including nitrosylation of nuclear proteins, the regulation of mRNA stability, and acting as a transferrin receptor on the cell surface of macrophage. Many pseudogenes similar to this locus are present in the human genome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2014]

View online »

Product images:



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