

Product datasheet for KN201232LP

OriGene Technologies, Inc.

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Glucose 6 phosphate isomerase (GPI) 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: Glucose 6 phosphate isomerase

Locus ID: 2821

Components: KN201232G1, Glucose 6 phosphate isomerase gRNA vector 1 in pCas-Guide CRISPR vector

(GE100002)

KN201232G2, Glucose 6 phosphate isomerase gRNA vector 2 in pCas-Guide CRISPR vector

(GE100002)

KN201232LPD, donor DNA containing left and right homologous arms and Luciferase-Puro

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

RefSeq: NM 000175, NM 001184722, NM 001289789, NM 001289790, NM 001329909,

NM 001329910, NM 001329911

UniProt ID: P06744

Synonyms: AMF; GNPI; NLK; PGI; PHI; SA-36; SA36

Summary: This gene encodes a member of the glucose phosphate isomerase protein family. The

encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. In the cytoplasm, the gene product functions as a glycolytic

enzyme (glucose-6-phosphate isomerase) that interconverts glucose-6-phosphate and fructose-6-phosphate. Extracellularly, the encoded protein (also referred to as neuroleukin) functions as a neurotrophic factor that promotes survival of skeletal motor neurons and sensory neurons, and as a lymphokine that induces immunoglobulin secretion. The encoded protein is also referred to as autocrine motility factor based on an additional function as a tumor-secreted cytokine and angiogenic factor. Defects in this gene are the cause of nonspherocytic hemolytic anemia and a severe enzyme deficiency can be associated with hydrops fetalis, immediate neonatal death and neurological impairment. Alternative splicing

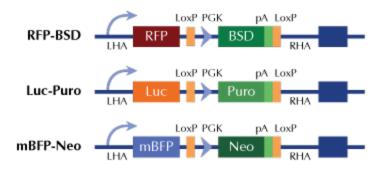
results in multiple transcript variants. [provided by RefSeq, Aug 2016]





Product images:

Donor Vector Edited Chromosome



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