

Product datasheet for KN211132RB

GLUD1 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: GLUD1 Locus ID: 2746

KN211132G1, GLUD1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) Components:

KN211132G2, GLUD1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN211132RBD, donor DNA containing left and right homologous arms and RFP-BSD

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 001318900, NM 001318901, NM 001318902, NM 001318904, NM 001318905,

NM 001318906, NM 005271

UniProt ID: P00367

GDH: GDH1: GLUD Synonyms:

Summary: This gene encodes glutamate dehydrogenase, which is a mitochondrial matrix enzyme that

> catalyzes the oxidative deamination of glutamate to alpha-ketoglutarate and ammonia. This enzyme has an important role in regulating amino acid-induced insulin secretion. It is allosterically activated by ADP and inhibited by GTP and ATP. Activating mutations in this gene are a common cause of congenital hyperinsulinism. Alternative splicing of this gene results in multiple transcript variants. The related glutamate dehydrogenase 2 gene on the human X-chromosome originated from this gene via retrotransposition and encodes a soluble form of glutamate dehydrogenase. Related pseudogenes have been identified on

chromosomes 10, 18 and X. [provided by RefSeq, Jan 2016]



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Product images:

Donor Vector Edited Chromosome



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