

Product datasheet for KN200313RB

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IDH3A 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: IDH3A Locus ID: 3419

KN200313G1, IDH3A gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) Components:

KN200313G2, IDH3A gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN200313RBD, 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.

NM 005530 RefSeq:

UniProt ID: P50213

Synonyms: H-IDH alpha; isocitrate dehydrogenase (NAD+) alpha chain; isocitrate dehydrogenase 3

(NAD+) a; isocitrate dehydrogenase [NAD] subunit alpha, mitochondrial; isocitric

dehydrogenase; NAD(H)-specific isocitrate dehydrogenase alpha subunit; NAD+-specific ICDH

Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-**Summary:**

> oxoglutarate. These enzymes belong to two distinct subclasses, one of which utilizes NAD(+) as the electron acceptor and the other NADP(+). Five isocitrate dehydrogenases have been

reported: three NAD(+)-dependent isocitrate dehydrogenases, which localize to the

mitochondrial matrix, and two NADP(+)-dependent isocitrate dehydrogenases, one of which

is mitochondrial and the other predominantly cytosolic. NAD(+)-dependent isocitrate

dehydrogenases catalyze the allosterically regulated rate-limiting step of the tricarboxylic acid cycle. Each isozyme is a heterotetramer that is composed of two alpha subunits, one beta subunit, and one gamma subunit. The protein encoded by this gene is the alpha subunit of one isozyme of NAD(+)-dependent isocitrate dehydrogenase. [provided by RefSeq, Jul 2008]





Product images:

Donor Vector Edited Chromosome



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