

Product datasheet for KN202977LP

OriGene Technologies, Inc.

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IMPDH2 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: IMPDH2 Locus ID: 3615

Components: KN202977G1, IMPDH2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN202977G2, IMPDH2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN202977LPD, 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: <u>NM 000884</u>

UniProt ID: P12268

Synonyms: IMPD2; IMPDH-II

Summary: This gene encodes the rate-limiting enzyme in the de novo guanine nucleotide biosynthesis.

It is thus involved in maintaining cellular guanine deoxy- and ribonucleotide pools needed for DNA and RNA synthesis. The encoded protein catalyzes the NAD-dependent oxidation of inosine-5'-monophosphate into xanthine-5'-monophosphate, which is then converted into guanosine-5'-monophosphate. This gene is up-regulated in some neoplasms, suggesting it

may play a role in malignant transformation. [provided by RefSeq, Jul 2008]





Product images:

Donor Vector Edited Chromosome



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