

## Product datasheet for KN215257LP

#### OriGene Technologies, Inc.

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## Insulin Receptor (INSR) 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: Insulin Receptor

**Locus ID:** 3643

**Components: KN215257G1**, Insulin Receptor gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

**KN215257G2**, Insulin Receptor gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN215257LPD**, 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 000208</u>, <u>NM 001079817</u>

UniProt ID: <u>P06213</u>

Synonyms: CD220; HHF5

**Summary:** This gene encodes a member of the receptor tyrosine kinase family of proteins. The encoded

preproprotein is proteolytically processed to generate alpha and beta subunits that form a heterotetrameric receptor. Binding of insulin or other ligands to this receptor activates the insulin signaling pathway, which regulates glucose uptake and release, as well as the synthesis and storage of carbohydrates, lipids and protein. Mutations in this gene underlie the inherited severe insulin resistance syndromes including type A insulin resistance syndrome, Donohue syndrome and Rabson-Mendenhall syndrome. Alternative splicing

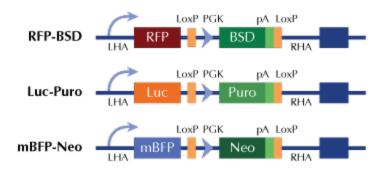
results in multiple transcript variants. [provided by RefSeq, Oct 2015]





# **Product images:**

#### Donor Vector Edited Chromosome



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