

Product datasheet for KN213707BN

LRP2 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control

Donor DNA: mBFP-Neo

Symbol: LRP2 Locus ID: 4036

Components: KN213707G1, LRP2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN213707G2, LRP2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN213707BND, donor DNA containing left and right homologous arms and mBFP-Neo

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 004525</u>

UniProt ID: <u>P98164</u>

Synonyms: DBS; GP330

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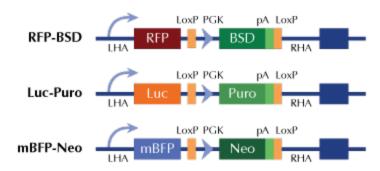


Summary:

The protein encoded by this gene, low density lipoprotein-related protein 2 (LRP2) or megalin, is a multi-ligand endocytic receptor that is expressed in many different tissues but primarily in absorptive epithilial tissues such as the kidney. This glycoprotein has a large aminoterminal extracellular domain, a single transmembrane domain, and a short carboxy-terminal cytoplasmic tail. The extracellular ligand-binding-domains bind diverse macromolecules including albumin, apolipoproteins B and E, and lipoprotein lipase. The LRP2 protein is critical for the reuptake of numerous ligands, including lipoproteins, sterols, vitamin-binding proteins, and hormones. This protein also has a role in cell-signaling; extracellular ligands include parathyroid horomones and the morphogen sonic hedgehog while cytosolic ligands include MAP kinase scaffold proteins and JNK interacting proteins. Recycling of this membrane receptor is regulated by phosphorylation of its cytoplasmic domain. Mutations in this gene cause Donnai-Barrow syndrome (DBS) and facio-oculoacoustico-renal syndrome (FOAR).[provided by RefSeq, Aug 2009]

Product images:

Donor Vector Edited Chromosome



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