

### **Product datasheet for TL311679**

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# LRP2 Human shRNA Plasmid Kit (Locus ID 4036)

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: LRP2 Human shRNA Plasmid Kit (Locus ID 4036)

**Locus ID:** 4036

Synonyms: DBS; GP330; LRP-2

**Vector:** pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

Components: LRP2 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 4036). 5µg

purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 004525, NM 004525.1, NM 004525.2, NM 004525.3

UniProt ID: P98164

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 amino-

terminal 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]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.



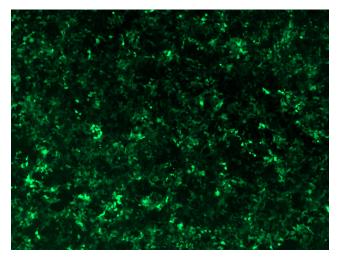


#### Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

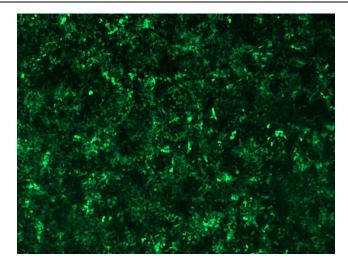
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).

# **Product images:**

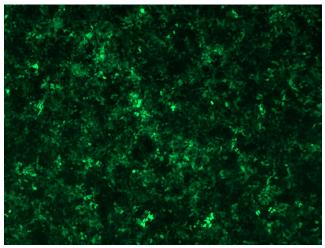


GFP signal was observed under microscope at 48 hours after transduction of TL311679A virus into HEK293 cells. TL311679A virus was prepared using lenti-shRNA TL311679A and [TR30037] packaging kit.

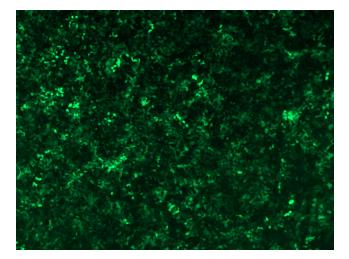




GFP signal was observed under microscope at 48 hours after transduction of TL311679B virus into HEK293 cells. TL311679B virus was prepared using lenti-shRNA TL311679B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL311679C] virus into HEK293 cells. [TL311679C] virus was prepared using lenti-shRNA [TL311679C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL311679D] virus into HEK293 cells. [TL311679D] virus was prepared using lenti-shRNA [TL311679D] and [TR30037] packaging kit.