

## Product datasheet for KN201206LP

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

### Sigma1 receptor (SIGMAR1) 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: Sigma1 receptor

**Locus ID:** 10280

**Components:** KN201206G1, Sigma1 receptor gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

**KN201206G2**, Sigma1 receptor gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN201206LPD**, 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: NM 001282205, NM 001282206, NM 001282207, NM 001282208, NM 001282209,

NM 005866, NM 147157, NM 147158, NM 147159, NM 147160, NR 104108

UniProt ID: Q99720

Synonyms: ALS16; DSMA2; hSigmaR1; OPRS1; SIG-1R; sigma1R; SR-BP; SR-BP1; SRBP

**Summary:** This gene encodes a receptor protein that interacts with a variety of psychotomimetic drugs,

including cocaine and amphetamines. The receptor is believed to play an important role in the cellular functions of various tissues associated with the endocrine, immune, and nervous systems. As indicated by its previous name, opioid receptor sigma 1 (OPRS1), the product of this gene was erroneously thought to function as an opioid receptor; it is now thought to be a non-opioid receptor. Mutations in this gene has been associated with juvenile amyotrophic lateral sclerosis 16. Alternative splicing of this gene results in transcript variants encoding

distinct isoforms. [provided by RefSeq, Aug 2013]





# **Product images:**

#### Donor Vector Edited Chromosome



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