

Product datasheet for TR311013

OriGene Technologies, Inc.

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Mu Opioid Receptor (OPRM1) Human shRNA Plasmid Kit (Locus ID 4988)

Product data:

Product Type: shRNA Plasmids

Product Name: Mu Opioid Receptor (OPRM1) Human shRNA Plasmid Kit (Locus ID 4988)

Locus ID: 4988

Synonyms: LMOR; M-OR-1; MOP; MOR; MOR1; OPRM

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: OPRM1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

4988). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 000914, NM 001008503, NM 001008504, NM 001008505, NM 001145279,

NM 001145280, NM 001145281, NM 001145282, NM 001145283, NM 001145284, NM 001145285, NM 001145286, NM 001145287, NM 001285522, NM 001285523,

NM 001285524, NM 001285526, NM 001285527, NM 001285528, NR 104348, NR 104349,

NR 104350, NR 104351, NM 000914.1, NM 000914.2, NM 000914.3, NM 000914.4,

NM 001008503.1, NM 001008503.2, NM 001008505.1, NM 001008505.2, NM 001008504.1, NM 001008504.2, NM 001008504.3, NM 001145281.1, NM 001145281.2, NM 001145284.1, NM 001145284.2, NM 001145284.3, NM 001145286.1, NM 001145286.2, NM 001145282.1, NM 001145282.2, NM 001145287.1, NM 001145287.2, NM 001145283.1, NM 001145283.2, NM 001145285.1, NM 001145285.2, NM 001145280.3, NM 001145279.2, NM 001145280.1, NM 001285527.1, NM 001285526.1, NM 001285528.1, NM 001285523.2, NM 001285523.1, NM 001285523.2, NM 001285523.2

NM 001285524.1, BC074927, BC074927.2, NM 001145279.4, NM 001285523.3,

NM 001008504.4, NM 001145280.4, NM 000914.5, NM 001145285.3, NM 001008503.3,

NM 001145281.3, NM 001145286.3

UniProt ID: P35372





Summary:

This gene encodes one of at least three opioid receptors in humans; the mu opioid receptor (MOR). The MOR is the principal target of endogenous opioid peptides and opioid analgesic agents such as beta-endorphin and enkephalins. The MOR also has an important role in dependence to other drugs of abuse, such as nicotine, cocaine, and alcohol via its modulation of the dopamine system. The NM_001008503.2:c.118A>G allele has been associated with opioid and alcohol addiction and variations in pain sensitivity but evidence for it having a causal role is conflicting. Multiple transcript variants encoding different isoforms have been found for this gene. Though the canonical MOR belongs to the superfamily of 7-transmembrane-spanning G-protein-coupled receptors some isoforms of this gene have only 6 transmembrane domains. [provided by RefSeq, Oct 2013]

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 techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

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).