

Product datasheet for TL310886

OriGene Technologies, Inc.

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OR2W5 Human shRNA Plasmid Kit (Locus ID 441932)

Product data:

Product Type: shRNA Plasmids

Product Name: OR2W5 Human shRNA Plasmid Kit (Locus ID 441932)

Locus ID: 441932

Synonyms: OR2W5P; OST722

Vector:pGFP-C-shLenti (TR30023)E. coli Selection:Chloramphenicol (34 ug/ml)

Mammalian Cell Puromycin

Selection:

Format: Lentiviral plasmids

Components: OR2W5 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

441932). 5µg purified plasmid DNA per construct

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

RefSeq: NM 001004698, NM 001004698.1, NM 001004698.2, BC137203, BC137204

UniProt ID: A6NFC9

Summary: Olfactory receptors interact with odorant molecules in the nose, to initiate a neuronal

response that triggers the perception of a smell. The olfactory receptor proteins are

members of a large family of G-protein-coupled receptors (GPCR) arising from single codingexon genes. Olfactory receptors share a 7-transmembrane domain structure with many neurotransmitter and hormone receptors and are responsible for the recognition and G protein-mediated transduction of odorant signals. The olfactory receptor gene family is the largest in the genome. The nomenclature assigned to the olfactory receptor genes and proteins for this organism is independent of other organisms. This olfactory receptor gene has a coding sequence that is comparable in length to other olfactory receptor genes, but it should be noted that a frameshift is present in the 3' coding region that disrupts the 7transmembrane domain structure in the protein. It is unclear if the protein can function as an olfactory receptor or if an alternate function is served. For this reason, this gene has also

been interpreted to be a pseudogene. [provided by RefSeq, Jan 2010]

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).