

Product datasheet for TR302790

OriGene Technologies, Inc.

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Olfactory Receptor OR2A4 (OR2A4) Human shRNA Plasmid Kit (Locus ID 79541)

Product data:

Product Type: shRNA Plasmids

Product Name: Olfactory Receptor OR2A4 (OR2A4) Human shRNA Plasmid Kit (Locus ID 79541)

Locus ID: 79541 **Synonyms:** OR2A10

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: OR2A4 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

79541). 5µg purified plasmid DNA per construct

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

RefSeq: NM 030908, NM 030908.1, NM 030908.2, BC120953, BC120954

UniProt ID: 095047

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. [provided by RefSeq, Jul 2008]

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).