OR2A2 siRNA – Olfactory Receptor 2a2 (Human)

PRODUCT OVERVIEW

Product Name	OR2A2, siRNA
Full Product Name	OR2A2 siRNA (Human)
Product Gene Name	OR2A2 sirna
Product Synonym Names	OR2A17P; OR2A2P; Olfactory receptor 2A2; Olfactory receptor 2A17; Olfactory receptor OR7-11
Host	Synthetic
Species Reactivity	Human
Form/Format	Lyophilized powder
Purity/Purification	> 97%
Specificity	OR2A2 siRNA (Human) is a target-specific 19-23 nt siRNA oligo duplexes designed to knock down gene expression.
Preparation and Storage	Shipped at 4 degree C. Store at -20 degree C for one year.
Molecular Weight	35,820 Da
3D Structure	ModBase 3D Structure for Q6IF42
Negative Control	siRNA Negative Control (Catalog# MBS8241404) is a non-targeting 21 nt siRNA recommended as a negative control for experiments using targeted siRNA transfection.
Quality Control	Oligonucleotide synthesis is monitored base by base through trityl analysis to ensure appropriate coupling efficiency. The oligo is subsequently purified by affinity-solid phase extraction. The annealed RNA duplex is further analyzed by mass spectrometry to verify the exact composition of the duplex. Each lot is compared to the previous lot by mass spectrometry to ensure maximum lot-to-lot consistency.
Directions for Use	We recommends transfection with 100 nM siRNA 48 to 72 hours prior to cell lysis. Before resuspending, briefly centrifuge the tube to ensure the lyophilized siRNA is at the bottom of the tube. Resuspend the siRNA oligos to an appropriate concentration with DEPC water. For each vial, suitable for 250 transfections in 24 well plate (20 pmol for each well).
Components	We offer pre-designed sets of 3 different target-specific siRNA oligo duplexes of human OR2A2 gene. Each vial contains 5 nmol of lyophilized siRNA. The duplexes can be transfected individually or pooled together to achieve knockdown of the target gene, which is most commonly assessed by qPCR or western blot. Our siRNA oligos are also chemically modified (2'-OMe) at no extra charge for increased stability and enhanced knockdown in vitro and in vivo.
Applications Tested/Suitable for OR2A2 sirna	RNA Interference (RNAi)
Related Product Information for OR2A2 sirna	MBS8226161 is an siRNA targeting OR2A2. Also known as OR2A2 siRNA (Human). Reactive in Human. Host: Synthetic. siRNA to inhibit OR2A2 expression using RNA interference
Other Notes	Small volumes of OR2A2 sirna vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for OR2A2. It may not necessarily be applicable to this product.

NCBI GI #	154759242

NCBI GeneID	442361
NCBI Accession #	NP_001005480.2
UniProt Primary Accession #	Q6IF42
UniProt Secondary Accession #	Q8NGT6; B2RN85
UniProt Related Accession #	Q6IF42
GenBank Nucleotide #	NM_001005480.2
NCBI Official Full Name	olfactory receptor 2A2
NCBI Official Synonym Full Names	olfactory receptor, family 2, subfamily A, member 2
NCBI Official Symbol	OR2A2
NCBI Official Synonym Symbols	OR2A2P; OR7-11; OST008; OR2A17P
UniProt Protein Name	Olfactory receptor 2A2
UniProt Synonym Protein Names	Olfactory receptor 2A17; Olfactory receptor OR7-11
Protein Family	Olfactory receptor
UniProt Gene Name	OR2A2
UniProt Synonym Gene Names	OR2A17P; OR2A2P
UniProt Entry Name	OR2A2_HUMAN
NCBI Protein Information	olfactory receptor 2A2
NCBI Summary for OR2A2	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 coding-exon 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]
UniProt Comments for OR2A2	OR2A2: Odorant receptor (Potential). Belongs to the G-protein coupled receptor 1 family. Protein type: GPCR, family 1; Membrane protein, multi-pass; Membrane protein, integral; Receptor, GPCR Chromosomal Location of Human Ortholog: 7q35 Cellular Component: integral to membrane; plasma membrane Molecular Function: olfactory receptor activity; taste receptor activity Biological Process: G-protein coupled receptor protein signaling pathway; detection of chemical stimulus involved in sensory perception of smell; detection of chemical stimulus involved in sensory perception of taste
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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