NPBWR1 siRNA – Neuropeptides B/W Receptor Type 1 (Human)

PRODUCT OVERVIEW

Product Name	NPBWR1, siRNA
Full Product Name	NPBWR1 siRNA (Human)
Product Gene Name	NPBWR1 sirna
Product Synonym Names	GPR7; Neuropeptides B/W receptor type 1; G-protein coupled receptor 7
Host	Synthetic
Species Reactivity	Human
Form/Format	Lyophilized powder
Purity/Purification	> 97%
Specificity	NPBWR1 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	36,103 Da
OMIM	600730
3D Structure	ModBase 3D Structure for P48145
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 NPBWR1 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 NPBWR1 sirna	RNA Interference (RNAi)
Related Product Information for NPBWR1 sirna	MBS8234635 is an siRNA targeting NPBWR1. Also known as NPBWR1 siRNA (Human). Reactive in Human. Host: Synthetic. siRNA to inhibit NPBWR1 expression using RNA interference
Other Notes	Small volumes of NPBWR1 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 NPBWR1. It may not necessarily be applicable to this product.

NCBI GI #	53828924
NCBI GeneID	2831
NCBI Accession #	NP_005276.2
UniProt Primary Accession #	P48145
UniProt Secondary Accession #	Q6NTC7
UniProt Related Accession #	P48145
GenBank Nucleotide #	NM_005285.3
NCBI Official Full Name	neuropeptides B/W receptor type 1
NCBI Official Synonym Full Names	neuropeptides B/W receptor 1
NCBI Official Symbol	NPBWR1
NCBI Official Synonym Symbols	GPR7
UniProt Protein Name	Neuropeptides B/W receptor type 1
UniProt Synonym Protein Names	G-protein coupled receptor 7
Protein Family	Neuropeptides B/W receptor
UniProt Gene Name	NPBWR1
UniProt Synonym Gene Names	GPR7
UniProt Entry Name	NPBW1_HUMAN
NCBI Protein Information	neuropeptides B/W receptor type 1
UniProt Comments for NPBWR1	NPBWR1: Interacts specifically with a number of opioid ligands. Receptor for neuropeptides B and W, which may be involved in neuroendocrine system regulation, food intake and the organization of other signals. Has a higher affinity for neuropeptide B. Belongs to the G-protein coupled receptor 1 family. Protein type: Membrane protein, multi-pass; Receptor, GPCR; GPCR, family 1; Membrane protein, integral Chromosomal Location of Human Ortholog: 8p22-q21.13 Cellular Component: neuron projection; integral to plasma membrane; integral to membrane; plasma membrane Molecular Function: neuropeptide binding; neuropeptide receptor activity; protein binding; opioid receptor activity Biological Process: synaptic transmission; G-protein coupled receptor protein signaling pathway; G-protein signaling, coupled to cyclic nucleotide second messenger; neuropeptide signaling pathway; regulation of metabolic process
Research Articles on NPBWR1	**1.** screening of GPR7 gene mutations among lean and obese subjects revealed a Tyr135Phe allelic variant that is fairly common in the study population. This variant is unlikely to cause a functional derangement of the receptor
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.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.

Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/human-sirna/npbwr1/8234635