PTGER2 siRNA – Prostaglandin E2 Receptor EP2 Subtype (Rat)

PRODUCT OVERVIEW

Product Name	PTGER2, siRNA
Full Product Name	PTGER2 siRNA (Rat)
Product Gene Name	PTGER2 sirna
Product Synonym Names	Prostaglandin E2 receptor EP2 subtype; PGE receptor EP2 subtype; PGE2 receptor EP2 subtype; Prostanoid EP2 receptor
Host	Synthetic
Species Reactivity	Rat
Form/Format	Lyophilized powder
Purity/Purification	> 97%
Specificity	PTGER2 siRNA (Rat) 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	39,772 Da
3D Structure	ModBase 3D Structure for Q62928
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 rat PTGER2 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 PTGER2 sirna	RNA Interference (RNAi)
Related Product Information for PTGER2 sirna	MBS8226849 is an siRNA targeting PTGER2. Also known as PTGER2 siRNA (Rat). Reactive in Rat. Host: Synthetic. siRNA to inhibit PTGER2 expression using RNA interference
Other Notes	Small volumes of PTGER2 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 PTGER2. It may not necessarily be applicable to this product.

NCBI GI #	13592031

NCBI GeneID	81752
NCBI Accession #	NP_112350.1
UniProt Primary Accession #	Q62928
UniProt Secondary Accession #	Q547S0
UniProt Related Accession #	Q62928
GenBank Nucleotide #	NM_031088.1
NCBI Official Full Name	prostaglandin E2 receptor EP2 subtype
NCBI Official Synonym Full Names	prostaglandin E receptor 2 (subtype EP2)
NCBI Official Symbol	Ptger2
NCBI Official Synonym Symbols	EP2; Ptger-ep2
UniProt Protein Name	Prostaglandin E2 receptor EP2 subtype
UniProt Synonym Protein Names	Prostanoid EP2 receptor
Protein Family	Prostaglandin E2 receptor
UniProt Gene Name	Ptger2
UniProt Synonym Gene Names	PGE receptor EP2 subtype; PGE2 receptor EP2 subtype
UniProt Entry Name	PE2R2_RAT
NCBI Protein Information	prostaglandin E2 receptor EP2 subtype
NCBI Summary for PTGER2	binds prostaglandin E2 and induces increased cAMP; may play a role in skeletal growth [RGD, Feb 2006]
UniProt Comments for PTGER2	PTGER2: Receptor for prostaglandin E2 (PGE2). The activity of this receptor is mediated by G(s) proteins that stimulate adenylate cyclase. The subsequent raise in intracellular cAMP is responsible for the relaxing effect of this receptor on smooth muscle. Belongs to the G-protein coupled receptor 1 family. Protein type: Membrane protein, multi-pass; GPCR, family 1; Receptor, GPCR; Membrane protein, integral Cellular Component: plasma membrane; integral to membrane Molecular Function: prostaglandin E receptor activity Biological Process: response to lipopolysaccharide; skeletal development; G-protein signaling, adenylate cyclase activating pathway; regulation of cell proliferation
Research Articles on PTGER2	**1.** These results indicate that EP2 activation, which initially promotes microglial activation, later causes delayed death of activated microglia, potentially contributing to the resolution phase of neuroinflammation.
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/rat-sirna/ptger2/8226849