PRDM7 siRNA – Probable Histone-Lysine N-Methyltransferase PRDM7 (Human)

PRODUCT OVERVIEW

Product Name	PRDM7, siRNA
Full Product Name	PRDM7 siRNA (Human)
Product Gene Name	PRDM7 sirna
Product Synonym Names	PFM4; Probable histone-lysine N-methyltransferase PRDM7; PR domain zinc finger protein 7; PR domain-containing protein 7
Host	Synthetic
Species Reactivity	Human
Form/Format	Lyophilized powder
Purity/Purification	> 97%
Specificity	PRDM7 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	45,890 Da
OMIM	609759
3D Structure	ModBase 3D Structure for Q9NQW5
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 PRDM7 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 PRDM7 sirna	RNA Interference (RNAi)
Related Product Information for PRDM7 sirna	MBS8220077 is an siRNA targeting PRDM7. Also known as PRDM7 siRNA (Human). Reactive in Human. Host: Synthetic. siRNA to inhibit PRDM7 expression using RNA interference
Other Notes	Small volumes of PRDM7 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 PRDM7. It may not necessarily be applicable to this product.

NCBI GI #	148271100
NCBI GeneID	11105
NCBI Accession #	NP_001091643.1
UniProt Primary Accession #	Q9NQW5
UniProt Secondary Accession #	Q08EM4; Q9NQW4; A4Q9G8
UniProt Related Accession #	Q9NQW5
GenBank Nucleotide #	NM_001098173.1
NCBI Official Full Name	probable histone-lysine N-methyltransferase PRDM7
NCBI Official Synonym Full Names	PR domain containing 7
NCBI Official Symbol	PRDM7
NCBI Official Synonym Symbols	PFM4; ZNF910
UniProt Protein Name	Probable histone-lysine N-methyltransferase PRDM7
UniProt Synonym Protein Names	PR domain zinc finger protein 7; PR domain-containing protein 7
Protein Family	Probable histone-lysine N-methyltransferase
UniProt Gene Name	PRDM7
UniProt Synonym Gene Names	PFM4
UniProt Entry Name	PRDM7_HUMAN
NCBI Protein Information	probable histone-lysine N-methyltransferase PRDM7
NCBI Summary for PRDM7	This gene encodes a member of a family of proteins that may have roles in transcription and other nuclear processes. The encoded protein contains a KRAB (Kruppel-associated box) domain -A box and a SET (Su(var)3-9, Enhancer-of-zeste, Trithorax) domain and may function as a histone methyltransferase. [provided by RefSeq, Aug 2013]
UniProt Comments for PRDM7	PRDM7: a probable histone methyltransferase. The mouse orthologous protein seems not to exist. Human PRDM7 and PRDM9 genes, a pair of close paralogs corresponding to a single mouse gene Prdm9, may have been generated by a recent gene duplication event after the divergence of the ancestors of human and mouse. Three isoforms of the human protein are produced by alternative splicing. Protein type: EC 2.1.1.43; Methyltransferase, protein lysine; Methyltransferase Chromosomal Location of Human Ortholog: 16q24.3 Cellular Component: chromosome; nucleus Molecular Function: nucleic acid binding; histone-lysine N-methyltransferase activity Biological Process: regulation of transcription, DNA-dependent
Research Articles on PRDM7	**1.** Evolutionary analysis suggests that human PRDM7 and PRDM9 genes, a pair of close paralogs corresponding to a single mouse gene Prdm9, were generated by a recent gene duplication event after the divergence of the ancestors of human and mouse.
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