TK1 siRNA – Thymidine Kinase, Cytosolic (Rat)

PRODUCT OVERVIEW

Product Name	TK1, siRNA
Full Product Name	TK1 siRNA (Rat)
Product Gene Name	TK1 sirna
Product Synonym Names	TK-1; Thymidine kinase. cytosolic; Fragment
Host	Synthetic
Species Reactivity	Rat
Form/Format	Lyophilized powder
Purity/Purification	> 97%
Specificity	TK1 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	13,511 Da
3D Structure	ModBase 3D Structure for P27158
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 TK1 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 TK1 sirna	RNA Interference (RNAi)
Related Product Information for TK1 sirna	MBS828745 is an siRNA targeting TK1. Also known as TK1 siRNA (Rat). Reactive in Rat. Host: Synthetic. siRNA to inhibit TK1 expression using RNA interference
Other Notes	Small volumes of TK1 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 TK1. It may not necessarily be applicable to this product.

NCBI GI #	158186787
NCBI GeneID	24834

NCBI Accession #	NP_434687.1
UniProt Primary Accession #	P27158
UniProt Secondary Accession #	Q6LAG4
UniProt Related Accession #	P27158
GenBank Nucleotide #	NM_052800.1
NCBI Official Full Name	thymidine kinase, cytosolic
NCBI Official Synonym Full Names	thymidine kinase 1, soluble
NCBI Official Symbol	Tk1
NCBI Official Synonym Symbols	Tk
UniProt Protein Name	Thymidine kinase, cytosolic
Protein Family	Thymidine kinase
UniProt Gene Name	Tk1
UniProt Synonym Gene Names	Tk-1
UniProt Entry Name	KITH_RAT
NCBI Protein Information	thymidine kinase, cytosolic
NCBI Summary for TK1	catalyzes the transfer of the terminal phosphate of ATP to thymidine to form thymidine 5'-phosphate (dTMP) [RGD, Feb 2006]
Research Articles on TK1	**1.** A cytosolic form of TK2 was identified in all tested tissues in addition to mitochondrial TK2. TK1 was detected in liver and spleen cytosolic extracts while dCK was found in liver, spleen and lung cytosolic extracts.
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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