

Product datasheet for **TR309547**

SEPP1 (SELENOP) Human shRNA Plasmid Kit (Locus ID 6414)

Product data:

Product Type:	shRNA Plasmids
Product Name:	SEPP1 (SELENOP) Human shRNA Plasmid Kit (Locus ID 6414)
Locus ID:	6414
Synonyms:	SELP; SeP; SEPP; SEPP1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	SELENOP - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 6414). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_001085486 , NM_001093726 , NM_005410 , NM_005410.1 , NM_005410.2 , NM_005410.3 , NM_001093726.1 , NM_001093726.2 , NM_001085486.1 , NM_001085486.2 , BC040075 , BC040075.1 , BC005244 , BC015875 , BC030009 , BC046152 , BC058919 , NM_005410.4
UniProt ID:	P49908
Summary:	This gene encodes a selenoprotein that is predominantly expressed in the liver and secreted into the plasma. This selenoprotein is unique in that it contains multiple selenocysteine (Sec) residues per polypeptide (10 in human), and accounts for most of the selenium in plasma. It has been implicated as an extracellular antioxidant, and in the transport of selenium to extra-hepatic tissues via apolipoprotein E receptor-2 (apoER2). Mice lacking this gene exhibit neurological dysfunction, suggesting its importance in normal brain function. Sec is encoded by the UGA codon, which normally signals translation termination. The 3' UTRs of selenoprotein mRNAs contain a conserved stem-loop structure, designated the Sec insertion sequence (SECIS) element, that is necessary for the recognition of UGA as a Sec codon, rather than as a stop signal. The mRNA for this selenoprotein contains two SECIS elements. The use of alternative polyadenylation sites, one located in between the two SECIS elements, results in two populations of mRNAs containing either both (predominant) or just the upstream SECIS element (PMID:27881738). Alternatively spliced transcript variants have also been found for this gene. [provided by RefSeq, Oct 2018]



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- shRNA Design:** These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).
- Performance Guaranteed:** OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.
- For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).