

## **Product datasheet for TL309435**

## OriGene Technologies, Inc.

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## SIRP alpha (SIRPA) Human shRNA Plasmid Kit (Locus ID 140885)

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: SIRP alpha (SIRPA) Human shRNA Plasmid Kit (Locus ID 140885)

**Locus ID:** 140885

Synonyms: BIT; CD172A; MFR; MYD-1; P84; PTPNS1; SHPS1; SIRP

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** SIRPA - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 140885).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: BC026692, NM 001040022, NM 001040023, NM 001330728, NM 080792, NM 080792.1,

NM 080792.2, NM 001040023.1, NM 001040022.1, BC026692.1, BC038510, BC038510.2,

BC033092, BC075849, NM 001040023.2

UniProt ID: P78324

**Summary:** The protein encoded by this gene is a member of the signal-regulatory-protein (SIRP) family,

and also belongs to the immunoglobulin superfamily. SIRP family members are receptor-type transmembrane glycoproteins known to be involved in the negative regulation of receptor tyrosine kinase-coupled signaling processes. This protein can be phosphorylated by tyrosine kinases. The phospho-tyrosine residues of this PTP have been shown to recruit SH2 domain containing tyrosine phosphatases (PTP), and serve as substrates of PTPs. This protein was found to participate in signal transduction mediated by various growth factor receptors. CD47 has been demonstrated to be a ligand for this receptor protein. This gene and its product share very high similarity with several other members of the SIRP family. These related genes are located in close proximity to each other on chromosome 20p13. Multiple alternatively spliced transcript variants have been determined for this gene. [provided by RefSeq, Jul 2008]

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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.







## 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).