

Product datasheet for TL307507

SPPL3 Human shRNA Plasmid Kit (Locus ID 121665)

Product data:

OriGene Technologies, Inc.

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| Product Type: | shRNA Plasmids |
|------------------------------|---|
| Product Name: | SPPL3 Human shRNA Plasmid Kit (Locus ID 121665) |
| Locus ID: | 121665 |
| Synonyms: | IMP2; MDHV1887; PRO4332; PSH1; PSL4 |
| Vector: | pGFP-C-shLenti (TR30023) |
| E. coli Selection: | Chloramphenicol (34 ug/ml) |
| Mammalian Cell Selection: | Puromycin |
| Format: | Lentiviral plasmids |
| Components: | SPPL3 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 121665). 5μg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free. |
| RefSeq: | <u>NM 139015</u> , <u>NM 139015.1, NM 139015.2</u> , <u>NM 139015.3</u> , <u>NM 139015.4</u> , <u>BC073910</u> , <u>BC073910.1</u> , <u>BC009551, BC025781, BC101625, BC101627, NM 139015.5</u> |
| UniProt ID: | <u>Q8TCT6</u> |
| Summary: | Intramembrane-cleaving aspartic protease (I-CLiP) that cleaves type II membrane protein substrates in or close to their luminal transmembrane domain boundaries (PubMed:16873890, PubMed:25354954, PubMed:25827571). Acts like a sheddase by mediating the proteolytic release and secretion of active site-containing ectodomains of glycan-modifiying glycosidase and glycosyltransferase enzymes such as MGAT5, B4GAT1 and B4GALT1 (PubMed:25354954, PubMed:25827571). Catalyzes the intramembrane cleavage of the envelope glycoprotein gp130 and/or the leader peptide gp18LP of the simian foamy virus independent of prior ectodomain shedding by furin or furin-like proprotein convertase (PC)- mediated cleavage proteolysis (PubMed:23132852). May also have the ability to serve as a shedding protease for subsequent intramembrane proteolysis by SPPL2A and SPPL2B of the envelope glycoprotein gp130 (PubMed:23132852). Plays a role in the regulation of cellular glycosylation processes (PubMed:25354954). Required to link T-cell antigen receptor (TCR) and calcineurin-NFAT signaling cascades in lymphocytes by promoting the association of STIM1 and ORAI1 during store-operated calcium entry (SOCE) in a protease-independent manner (PubMed:25384971).[UniProtKB/Swiss-Prot Function] |



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| | SPPL3 Human shRNA Plasmid Kit (Locus ID 121665) – TL307507 |
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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 <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). |

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