

#### OriGene Technologies, Inc.

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# Product datasheet for TL300978

### Transmembrane protein 30A (TMEM30A) Human shRNA Plasmid Kit (Locus ID 55754)

#### **Product data:**

Product Type:	shRNA Plasmids
Product Name:	Transmembrane protein 30A (TMEM30A) Human shRNA Plasmid Kit (Locus ID 55754)
Locus ID:	55754
Synonyms:	C6orf67; CDC50A
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	TMEM30A - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 55754). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	<u>NM 001143958, NM 018247, NM 018247.1, NM 018247.2, NM 018247.3, NM 001143958.1, BC009006, NM 001143958.2, NM 018247.4</u>
UniProt ID:	<u>Q9NV96</u>



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	Transmembrane protein 30A (TMEM30A) Human shRNA Plasmid Kit (Locus ID 55754) – TL300978
Summary:	Accessory component of a P4-ATPase flippase complex which catalyzes the hydrolysis of ATP coupled to the transport of aminophospholipids from the outer to the inner leaflet of various membranes and ensures the maintenance of asymmetric distribution of phospholipids. Phospholipid translocation seems also to be implicated in vesicle formation and in uptake of lipid signaling molecules. The beta subunit may assist in binding of the phospholipid substrate. Required for the proper folding, assembly and ER to Golgi exit of the ATP8A2:TMEM30A flippase complex. ATP8A2:TMEM30A may be involved in regulation of neurite outgrowth, and, reconstituted to liposomes, predomiminantly transports phosphatidylserine (PS) and to a lesser extent phosphatidylethanolamine (PE). The ATP8A1:TMEM30A flippase complex seems to play a role in regulation of cell migration probably involving flippase-mediated translocation of phosphatidylethanolamine (PE) at the plasma membrane. Required for the formation of the ATP8A2, ATP8B1 and ATP8B2 P-type ATPAse intermediate phospholenzymes. Involved in uptake of platelet-activating factor (PAF), synthetic drug alkylphospholipid edelfosine, and, probably in association with ATP8B1, of perifosine. Also mediate the export of alpha subunits ATP8A1, ATP8B1, ATP8B2, ATP8B4, ATP10A, ATP10B, ATP10D, ATP11A, ATP11B and ATP11C from the ER to other membrane localizations.[UniProtKB/Swiss-Prot Function]
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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## **Product images:**



GFP signal was observed under microscope at 48 hours after transduction of TL300978A virus into HEK293 cells. TL300978A virus was prepared using lenti-shRNA TL300978A and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of TL300978B virus into HEK293 cells. TL300978B virus was prepared using lenti-shRNA TL300978B and [TR30037] packaging kit.

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GFP signal was observed under microscope at 48 hours after transduction of [TL300978C] virus into HEK293 cells. [TL300978C] virus was prepared using lenti-shRNA [TL300978C] and [TR30037] packaging kit.

GFP signal was observed under microscope at 48 hours after transduction of [TL300978D] virus into HEK293 cells. [TL300978D] virus was prepared using lenti-shRNA [TL300978D] and [TR30037] packaging kit.

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