

Product datasheet for TL306501

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

ATP13A5 Human shRNA Plasmid Kit (Locus ID 344905)

Product data:

Product Type: shRNA Plasmids

Product Name: ATP13A5 Human shRNA Plasmid Kit (Locus ID 344905)

Locus ID: 344905

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: ATP13A5 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

344905). 5µg purified plasmid DNA per construct

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

RefSeq: NM 198505, NM 198505.1, NM 198505.2, BC033334, BC156652, NM 198505.4

UniProt ID: Q4VNC0

Summary: This gene encodes a member of the P5 subfamily of P-type transport ATPases. P-type ATPases

form a large superfamily of cation and lipid pumps that transport inorganic cations and other

substrates across cell membranes. P5 ATPases are localized to membranes of the

endoplasmic reticulum (ER) and serve many important functions including transport of cargo proteins to the Golgi, glycosylation and cell wall biosynthesis, control of protein insertion orientation, 3-hydroxy-3-methylglutaryl-CoA reductase (HMGR) degradation, and sensitivity to unfolded protein response (UPR) activators. The encoded protein is organized into three cytoplasmic domains (A, P, and N) and two membrane-embedded domains (T and S). The N-domain binds ATP and serves as a built-in protein kinase, which phosphorylates the P-domain. The A-domain is an intrinsic protein phosphatase, which dephosphorylates the P-

domain once during each catalytic cycle. [provided by RefSeq, Jul 2017]

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).