

Product datasheet for TL306917

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OriGene Technologies, Inc.

ABCD4 Human shRNA Plasmid Kit (Locus ID 5826)

Product data:

Product Type: shRNA Plasmids

Product Name: ABCD4 Human shRNA Plasmid Kit (Locus ID 5826)

Locus ID: 5826

Synonyms: ABC41; EST352188; MAHCJ; P70R; P79R; PMP69; PXMP1L

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

Puromycin

Selection:

Format: Lentiviral plasmids

Components: ABCD4 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 5826).

5µg purified plasmid DNA per construct

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

RefSeq: NM 005050, NM 020323, NM 020324, NM 020325, NM 020326, NR 003256, NM 001353591,

NM 001353592, NM 001353593, NM 001353594, NM 001353595, NM 001353596, NM 001353597, NM 001353598, NM 001353599, NM 001353600, NM 001353601, NM 001353602, NM 001353603, NM 001353604, NM 001353605, NM 001353606,

NM 001353607, NM 001353608, NM 001353609, NM 001353610, NR 148466, NR 148467, NR 148468, NR 148469, NR 148470, NR 148471, NR 148472, NR 148473, NR 148474, NM 005050.1, NM 005050.2, NM 005050.3, NM 020323.1, NM 020324.1, NM 020325.1,

NM 020326.2, BC012815, BC012815.2, BM667379, NM 005050.4

UniProt ID: <u>O14678</u>





Summary:

The protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the ALD subfamily, which is involved in peroxisomal import of fatty acids and/or fatty acyl-CoAs in the organelle. All known peroxisomal ABC transporters are half transporters which require a partner half transporter molecule to form a functional homodimeric or heterodimeric transporter. The function of this peroxisomal membrane protein is unknown. However, it is speculated that it may function as a heterodimer for another peroxisomal ABC transporter and, therefore, may modify the adrenoleukodystrophy phenotype. It may also play a role in the process of peroxisome biogenesis. Alternative splicing results in several protein-coding and non-protein-coding variants. [provided by RefSeq, Jul 2017]

shRNA Design:

Performance Guaranteed: 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.

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).