

Product datasheet for TG304508

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FHOD3 Human shRNA Plasmid Kit (Locus ID 80206)

Product data:

Product Type: shRNA Plasmids

Product Name: FHOD3 Human shRNA Plasmid Kit (Locus ID 80206)

Locus ID: 80206

Synonyms: CMH28; FHOS2; Formactin2

Vector: pGFP-V-RS (TR30007)

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: FHOD3 - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 80206).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.

RefSeq: NM 001281739, NM 001281740, NM 025135, NM 025135.1, NM 025135.2, NM 025135.3,

NM 025135.4, NM 001281739.1, NM 001281739.2, NM 001281740.1, NM 001281740.2, BC031518, BC041040, BC050670, BC058897, BC081563, BC156314, BC157093, NM 025135.5,

NM 001281740.3, NM 001281739.3

UniProt ID: Q2V2M9

Summary: The protein encoded by this gene is a member of the diaphanous-related formins (DRF), and

contains multiple domains, including GBD (GTPase-binding domain), DID (diaphanous inhibitory domain), FH1 (formin homology 1), FH2 (formin homology 2), and DAD (diaphanous auto-regulatory domain) domains. This protein is thought to play a role in actin filament polymerization in cardiomyocytes. Mutations in this gene have been associated with dilated cardiomyopathy (DCM), characterized by dilation of the ventricular chamber, leading to impairment of systolic pump function and subsequent heart failure. Increased levels of the

protein encoded by this gene have been observed in individuals with hypertrophic

cardiomyopathy (HCM). Alternative splicing results in multiple transcript variants encoding different isoforms. A muscle-specific isoform has been shown to possess a casein kinase 2 (CK2) phosphorylation site at the C-terminal end of the FH2 domain. Phosphorylation of this

site alters its interaction with sequestosome 1 (SQSTM1), and targets this isoform to

myofibrils, while other isoforms form cytoplasmic aggregates. [provided by RefSeq, Aug 2015]







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

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).