

Product datasheet for RC221215L3V

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

FHOD3 (NM 025135) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: FHOD3 (NM_025135) Human Tagged ORF Clone Lentiviral Particle

Symbol:

CMH28; FHOS2; Formactin2 Synonyms:

Mammalian Cell

Selection:

ACCN:

Puromycin

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

NM 025135

Myc-DDK Tag:

ORF Size: 4317 bp

ORF Nucleotide

OTI Disclaimer:

Sequence:

The ORF insert of this clone is exactly the same as(RC221215).

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

RefSeq: NM 025135.2

RefSeq Size: 4942 bp RefSeq ORF: 4320 bp Locus ID: 80206 **UniProt ID:** Q2V2M9 Cytogenetics: 18q12.2 **Domains:** FH2

MW: 160.6 kDa







Gene 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]