

Product datasheet for RC221215L4

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OriGene Technologies, Inc.

FHOD3 (NM_025135) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: FHOD3 (NM 025135) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: FHOD3

Synonyms: CMH28; FHOS2; Formactin2

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

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

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

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_025135

ORF Size: 4317 bp





FHOD3 (NM_025135) Human Tagged Lenti ORF Clone - RC221215L4

OTI Disclaimer: 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.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 025135.2</u>

 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

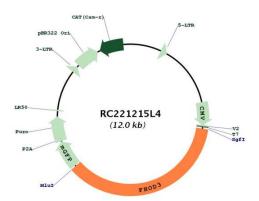
cardiomyopathy (HCM). Alternative splicing results in multiple transcript variants encoding different isoforms. A muscle-specific isoform has been shown to possess a casein kinase 2 (CK2) phosphorylation site at the C-terminal end of the FH2 domain. Phosphorylation of this

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]



Product images:



Circular map for RC221215L4