

# **Product datasheet for SC315231**

### OriGene Technologies, Inc.

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## FHOD3 (AB051482) Human Untagged Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** FHOD3 (AB051482) Human Untagged Clone

Tag: Tag Free Symbol: FHOD3

**Synonyms:** FHOS2; Formactin2

**Vector:** <u>pCMV6 series</u>

Fully Sequenced ORF: >NCBI ORF sequence for AB051482, the custom clone sequence may differ by one or more

nucleotides

**Restriction Sites:** Please inquire

**ACCN:** AB051482

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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>AB051482.1</u>, <u>BAB21786.1</u>

RefSeq Size: 4126 bp





#### FHOD3 (AB051482) Human Untagged Clone - SC315231

RefSeq ORF: 4126 bp Locus ID: 80206 Cytogenetics: 18q12.2 Domains: FH2

**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]