

Product datasheet for **SC110946**

FHOD3 (NM_025135) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Tag Free
Symbol:	FHOD3
Synonyms:	CMH28; FHOS2; Formactin2
Mammalian Cell	None
Selection:	
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_025135, the custom clone sequence may differ by one or more nucleotides

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ATGGCCACGCTGGCTTGCCGGGTGCAGTTCTTGGACGACACGGACCCTTTCAACAGCACCAACTTCCCCG
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5' Read Nucleotide

Sequence:

>OriGene 5' read for NM_025135 unedited
ACGACTCACTATAGGGCGGCCGCAATTCGGCACGAGGCCTGTCCCTGGTAATTTATTGG
TTCCTCCTCCTCCAGTGTTCACGCTCCTCAGGGCTTAGGGTGGTCCCAGGTACCCAGGG
GTCAGCCCACTTCACTAAGAAAAAGAAAGACCATCCGTTTGTCTGGAATGAAGTTCGGC
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AGCGTTTGAGTTAAGCTACCTCGAGAAGGTNNCAGAAGTCAAGACACAGTGCACAAGCAG
TCGCTTCTACCATGTGTGCACCATGGNTGGNTAGAACTTCCAGAAGGCTCCGATCTGT
CNTTCGAGATACGGGCCATCACCCAGTCANCCAAGGGTGACTTTGATCAACTCAGGAAAA
TTNATGTCAAATGGAAAGAGATGCC

3' Read Nucleotide

Sequence:

>OriGene 3' read for NM_025135 unedited
GACCGCGGCCGAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTGGCATTAAACTCTATT
TATTTAGTATTTGAAACATGGTGTACATGTATGTTGTATAAACATTTGTTACATCTA
AAATCCACAACAGGTAAACAATCTGTGCTTTCTTTTGTGTACAAGTTTGGGGTTTACATC
TGGATATTTTGGTGTGTGGAGACTCAGTCTGTGAAGCTAATCAGATTGCCTCATATTAC
CATAAATACTGTGACAGAAGTATTTGCTCCTTAAAGGGCTGTTCTTGCCAGAAAAG
GTGTACACACTTTTGAACATAATAACCGGGTGTACGGAATCAAGAGAAACACAGCTGACA
CGATGGAGAAGGTATGTGACGGGACTCCTGGAGATCCAAGTCAATGCGTAGCAGGCAAC
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AGCACACTCCTGGGAGTAACCTATGAGTGTACAGCTGCAACTCCGAGGTGCCAACCAAG
CCCAGGGCTCNTGGCTTCTTCTGGGGTCAGGCCGCTCTTCAGGGTCTTCGCAAAGATTT
CCGGTTGGCCCNNGGATCGTTTCTCTCCCTCGGCACCACTCGTGACTGGGCACTTGGG
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GGACGCCANCGCGGGNNTGCGTCTCCACGGAGGGGACNAGTTTTACACAGCCTTCAT
GTNTCGTGCTCACCCCGGTCTCCCATAGCTAAACCTGCGGCNTGCTNNGGGCCCCGAAAC
TGCGGAAATGCCCATCGNGAAATCTCCTTGGCCTATTCTTTTGGGGTGCCGTTCTGT
T

Restriction Sites:

NotI-NotI

ACCN:

NM_025135

Insert Size:

2390 bp

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).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_025135.1, NP_079411.1</u>
RefSeq Size:	5002 bp
RefSeq ORF:	1257 bp
Locus ID:	80206
UniProt ID:	<u>Q2V2M9</u>
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] Transcript Variant: This variant (1) encodes isoform 1.