

## Product datasheet for SC107911

### DFFB (NM\_004402) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DFFB (NM_004402) Human Untagged Clone
Tag:	Tag Free
Symbol:	DFFB
Synonyms:	CAD; CPAN; DFF-40; DFF2; DFF40
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC107911 sequence for NM_004402 edited (data generated by NextGen Sequencing)

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ATGCTCCAGAAGCCCAAGAGCGTGAAGCTGCGGGCCCTGCGCAGCCCAGGAAGTTCGGC
GTGGCTGGCCGGAGCTGCCAGGAGGTGCTGCGCAAGGGCTGTCTCCGCTTCCAGTCCCT
GAGCGCGTTCGCCGCTGTGCCTGTACGAGGATGGCACGGAGCTGACGGAAGATTACTTC
CCCAGTGTTCGCCACAACGCCGAGCTGGTGTGCTCACCTTGGGCCAGGCCTGGCAGGGC
TATGTGAGCGACATCAGGCGCTTCTCAGTGCATTTACGAGCCACAGGTGGGGCTCATC
CAGGCCGCCAGCAGCTGCTGTGTGATGAGCAGGCCCCACAGAGGCAGAGGCTGCTGGCT
GACCTCTGCACAACGTGAGCCAGAACATCGCGGCCGAGACCCGGGCTGAGGACCCGCCG
TGGTTTGAAGGCTTGGAGTCCCATTTCAGAGCAAGTCTGGCTATCTGAGATACAGCTGT
GAGAGCCGGATCCGGAGTTACCTGAGGGAGGTGAGCTCCTACCCCTCCACGGTGGGTGCG
GAGGCTCAGGAGGAATCCTGCGGGTCCCGGCTCCATGTGCCAGAAGCTCCGGTCCATG
CAGTACAATGGCAGCTACTTCGACAGAGGAGCCAAGGGCGGCAGCCGCCTCTGCACACCG
GAAGGCTGGTTCTCCTGCCAGGGTCCCTTTGACATGGACAGCTGCTTATCAAGACTCC
ATCAACCCTACAGTAACAGGGAGAGCAGGATCCTCTTACGACCTGGAACCTGGATCGC
ATAATAGAAAAGAAACGCACCATCATTCTACTGGTGGAAAGCAATTAAGGAACAAGAT
GGAAGAGAAGTGGACTGGGAGTATTTTTATGGCCTGCTTTTTACCTCAGAGAACCTAAAA
CTAGTGACATTGTCTGCCATAAGAAAACCCACCAAGCTCAACTGTGACCCAAGCAGA
ATCTACAAACCCAGACAAGGTTGAAGCGGAAGCAGCCTGTGCGAAACGCCAGTGA

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Clone variation with respect to NM\_004402.2  
587 g=>a;779 a=>g



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**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_004402 unedited  
 AAAAAAAGGGGANNANAANAAAAACACCCCCCGTTTACAATTGTATACGACTCATA  
 TAGGCGGCCGCGNAATTCGCACGAGGCCAGCTTGACAGCTCACCAGGTGCAGACCCCTG  
 CGGCCAGGGCGAGGACGGATCTGAGCAGCTGGGCAGCAGGTGCCACCGCCTGTGGGACCC  
 AGAGGGCTTGAGGACATCTGCAATGCTCCAGAAGCCAAAGAGCGTGAAGCTGCGGGCCCT  
 GCGCAGCCCGAGGAAGTTCGGCGTGGCTGGCCGGAGCTGCCAGGAGGTGCTGCGCAAGGG  
 CTGTCTCCGCTTCCAGCTCCCTGAGCGCGGTTCCCGCTGTGCCTGTACGAGGATGGCAC  
 GGAGCTGACGGAAGATTACTTCCCAGTGTCCCGACAACGCCGAGCTGGTGTCTGCTCAC  
 CTTGGGCCAGGCCTGGCAGGGCTATGTGAGCGACATCAGGCGCTTCTCAGTGCATTTCA  
 CGAGCCACAGGTGGGGCTCATCCAGGCCGCCAGCAGCTGCTGTGTGATGAGCAGGCCCC  
 ACAGAGGCAGAGGCTGCTGGCTGACCTCCTGCACAACGTCAGCCAGAACATCGCGGCCGA  
 GACCCGGGCTGAGGACCCGCCGTGGTTTGAAGGCTTGGAGTCCCGATTTTCAGAGCAAGTC  
 TGGCTATCTGAGATACAGCTGTGAGAGCCNATCCGGAGTTACCTGNAGGAGGTGAGCTC  
 CTACCCCTCCCACGTGGGTGCGGAGGCTCCAGAGGAATCCTGCCGCTCCTCCGCTCCAT  
 GGGCCANAAGCTTCCGTCATGCAGTACAATGGCAGCTACTTCCACAGAGGAGCCAAGGC  
 CGGCAGCCGCTTTCACACCCGGAAGGGTGTCTCCCTGCCGGTCCCTTTGACAGGAA  
 CAGCTGCTTAAN

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_004402 unedited  
 NNTTCTGTGNACCGCGCCAATCTANGATCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTT  
 TGAAAAATCTTTATTGCTTTTCCTGATTGTACAACAAATGTAATAATCAAATATTACAA  
 AATGACTTAATTTAAAAAGTACATTTTAAACATGTTATAAAATAAATGCCATTTCAAAAA  
 ATTCAAGTATCATAAAATACATGACGTAGAAAATGAGTCTCTGTAATCTAGCCCAACCC  
 CCGTATCCCCAGGATTACTGCTGTTTCCAGTCCGCGTGTTCCTTCCAGACCGTCTCGTG  
 GTGNCNNNNNACCNCNCCCGNCCNCCCAACCCCCCAACCAACGGGGCCTTGGACCATGA  
 AGCCTTCCATATTGAATCCCGNAGNATGAAATAGTTAACCGCTGAACCAACGGAAGCCA  
 AGGGTTTCAANCTGCCCGGATGCCCCCTGGAAACAAGCTTCCCAGTTTTTCCTTAACACCA  
 GAAAACCCCTTTTTCCCTTCAATAAAAAAACCTTGGAAAAACCTGGGGGAACACCAAAT  
 TTTTTTGGCCCTTTTGGTAAAAATGGTATTCAAGGGTTGGAAATCCCTTGAAAAATAAAA  
 TGGGATACCCCTTAACCCATTTTTTTGGGCCCTTAAAAAACAAGAGTTTTTCC  
 CCCGGGGTTCAAAACGGGGAAAAAACTTTGGTTTTTAAAAAACAATTTGGGGGG  
 GGGGGGTTTTCCCTTTTTTTTCTCTGTGGCCCTTTTTTTAATAAAACAATTTTTTC  
 AACCCGGGGGGTACAGAGGGGGCCCCACGGGGGGGTTTTAAAGCCCCCGGTGAT  
 AAACCCCCCCCACCACCTC

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_004402

**Insert Size:**

3340 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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_004402.2</a> , <a href="#">NP_004393.1</a>
<b>RefSeq Size:</b>	3034 bp
<b>RefSeq ORF:</b>	1017 bp
<b>Locus ID:</b>	1677
<b>UniProt ID:</b>	<a href="#">O76075</a>
<b>Cytogenetics:</b>	1p36.32
<b>Domains:</b>	CAD
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Apoptosis
<b>Gene Summary:</b>	<p>Apoptosis is a cell death process that removes toxic and/or useless cells during mammalian development. The apoptotic process is accompanied by shrinkage and fragmentation of the cells and nuclei and degradation of the chromosomal DNA into nucleosomal units. DNA fragmentation factor (DFF) is a heterodimeric protein of 40-kD (DFFB) and 45-kD (DFFA) subunits. DFFA is the substrate for caspase-3 and triggers DNA fragmentation during apoptosis. DFF becomes activated when DFFA is cleaved by caspase-3. The cleaved fragments of DFFA dissociate from DFFB, the active component of DFF. DFFB has been found to trigger both DNA fragmentation and chromatin condensation during apoptosis. Alternatively spliced transcript variants encoding distinct isoforms have been found for this gene but the biological validity of some of these variants has not been determined. [provided by RefSeq, Sep 2013]</p> <p>Transcript Variant: This variant (2) contains two consecutive alternate splice junctions compared to variant 1. The resulting isoform (2) has the same N- and C-termini but lacks an internal segment compared to isoform 1.</p>