

Product datasheet for **SC308657**

ICAD (DFFA) (NM_213566) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ICAD (DFFA) (NM_213566) Human Untagged Clone
Tag:	Tag Free
Symbol:	ICAD
Synonyms:	DFF-45; DFF1; ICAD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC308657 representing NM_213566. Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
 GATCCGGTACCGAGGAGATCTGCCGCC**GCGATCGCC**
 ATGGAGGTGACCGGGGACGCCGGGTACCAGAATCTGGCGAGATCCGGACTCTAAAGCCGTGTCTGCTG
 CGCCGCAACTACAGCCGGAACAGCACGGCGTGGCCGCCTCTGCCTCGAAGACCTGAGGAGCAAGGCC
 TGTGACATTCTGGCCATTGATAAGTCCCTGACACCAGTCACCCTGGTCTGGCAGAGGATGGCACCATA
 GTGGATGATGACGATTACTTTCTGTGTCTACCTCCAATACTAAGTTTGTGGCATTGGCTAGTAATGAG
 AAATGGGCATACAACAATTCAGATGGAGGTACAGCTTGGATTTCCAAGAGTCCTTTGATGTAGATGAA
 ACAGACAGCGGGCAGGTTGAAGTGGAAGAATGTGGCCAGGCAGCTGAAAGAAGATCTGTCCAGCATC
 ATCCTCTATCAGAGGAGGACCTCCAGATGCTTGTGACGCTCCCTGCTCAGACCTGGCTCAGGAACCTA
 CGTCAGAGTTGTGCCACCGTCCAGCGGCTGCAGCACACACTCCAACAGGTGCTTGACCAAAGAGAGGAA
 GTGCGTCAGTCCAAGCAGCTCCTGCAGCTGTACCTCCAGGCTTTGGAGAAAGAGGGCAGCCTCTTGTCA
 AAGCAGGAAGAGTCCAAAGCTGCCTTTGGTGAGGAGGTGGATGCAGTAGACACGGGTATCAGCAGAGAG
 ACCTCCTCGGACGTTGCGCTGGCGAGCCACATCCTTACTGCACTGAGGGAGAAGCAGGCTCCAGAGCTG
 AGCTTATCTAGTCAGGATTTGGAGGTGGCGGAAACCAGGGTCAC**TGA**
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
 TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites:	SgfI-MluI
ACCN:	NM_213566
Insert Size:	807 bp


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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:	<ol style="list-style-type: none"> 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_213566.1</u>
RefSeq Size:	3408 bp
RefSeq ORF:	807 bp
Locus ID:	1676
UniProt ID:	<u>O00273</u>
Cytogenetics:	1p36.22
Protein Pathways:	Apoptosis
MW:	29.4 kDa
Gene Summary:	<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. Two alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (2) has an additional segment in the 3' region, as compared to variant 1. It encodes isoform 2 which has a shorter and distinct C-terminus, as compared to isoform 1.</p>