

Product datasheet for **SC315293**

APAF1 (NM_013229) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: APAF1 (NM_013229) Human Untagged Clone
Tag: Tag Free
Symbol: APAF1
Synonyms: APAF-1; CED4
Vector: pCMV6 series
Fully Sequenced ORF: >NCBI ORF sequence for NM_013229, the custom clone sequence may differ by one or more nucleotides

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ATGGATGCAAAAAGCTCGAAATTGTTTGCTTCAACATAGAGAAGCTCTGGAAAAGGACATC
AAGACATCCTACATCATGGATCACATGATTAGTGATGGATTTTTAAACAATATCAGAAGAG
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ATACTAGATGAAAAGGATTGTGCAGTCAGTGAGAATTTTCAGGAGTTTTTATCTTTAAAT
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ATGCTTTACCTGGAATGGATAAACAAAAAACATCACGAATCTTTCCCGCTTAGTTGTC
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 GGAGCTGTACCCATGGAGGCTGGGTGACTGACCTTTGCTTTTCTCCAGATGGCAAATG
 CTTATCTCTGCTGGAGGATATATTAAGTGGTGAACGTTGTCACTGGGGAATCCTCACAG
 ACCTTCTACACAAATGGAACCAATCTTAAGAAAATACACGTGTCCCTGACTTCAAACA
 TATGTGACTGTGGATAATCTTGGTATTTTATATATTTACAGACTTTAGAA

Restriction Sites:

Please inquire

ACCN:

NM_013229

OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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 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:	NM_013229.2 , NP_037361.1
RefSeq Size:	7171 bp
RefSeq ORF:	3714 bp
Locus ID:	317
UniProt ID:	O14727
Cytogenetics:	12q23.1
Domains:	CARD, WD40, NB-ARC
Protein Families:	Druggable Genome
Protein Pathways:	Alzheimer's disease, Amyotrophic lateral sclerosis (ALS), Apoptosis, Huntington's disease, p53 signaling pathway, Parkinson's disease, Small cell lung cancer
Gene Summary:	<p>This gene encodes a cytoplasmic protein that initiates apoptosis. This protein contains several copies of the WD-40 domain, a caspase recruitment domain (CARD), and an ATPase domain (NB-ARC). Upon binding cytochrome c and dATP, this protein forms an oligomeric apoptosome. The apoptosome binds and cleaves caspase 9 preproprotein, releasing its mature, activated form. Activated caspase 9 stimulates the subsequent caspase cascade that commits the cell to apoptosis. Alternative splicing results in several transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (1) uses an alternate splice site in the coding region but maintains the reading frame, compared to variant 3. Variant 1 encodes isoform a, which is shorter than isoform c.</p>