

## Product datasheet for **SC323319**

### APC (NM\_001127510) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	APC (NM_001127510) Human Untagged Clone
Tag:	Tag Free
Symbol:	APC
Synonyms:	BTPS2; DESMD; DP2; DP2.5; DP3; GS; PPP1R46
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC323319 representing NM_001127510. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCTGCAGCTTCATATGATCAGTTGTTAAAGCAAGTTGAGGCACTGAAGATGGAGAAGCTCAAATCTT
CGACAAGAGCTAGAAGATAATTCCAATCATCTTACAAAAGTGGAACTGAGGCATCTAATATGAAGGAA
GTACTTAAACAAGTACAAGGAAGTATTGAAGTGAAGCTATGGCTTCTTGGACAGATTGATTTATTA
GAGCGTCTTAAAGAGCTTAACTTAGATAGCAGTAATTTCCCTGGAGTAAAAGTGGGTCAAAATGTCC
CTCCGTTCTTATGAAGCCGGGAAGGATCTGTATCAAGCCGTTCTGGAGAGTGCAGTCTGTTCTATG
GGTTCATTTCCAAGAAGAGGGTTTGTAAATGGAAGCAGAGAAAGTACTGGATATTTAGAAGAACTTGAG
AAAGAGAGGTCATTGCTTCTGCTGATCTTGACAAAGAAGAAAAGGAAAAGACTGGTATTACGCTCAA
CTTCAGAACTCTACTAAAAGAATAGATAGTCTTCTTTAACTGAAAATTTTTCTTACAAAACAGATATG
ACCAGAAGGCAATTGGAATATGAAGCAAGGCAAAATCAGAGTTGCGATGGAAGAACAAGTACCTGC
CAGGATATGGAAGAAACGAGCACAGCGAAGAATAGCCAGAATTCAGCAAAATCGAAAAGGACATACTTCGT
ATACGACAGCTTTTACAGTCCCAAGCAACAGAAGCAGAGAGGTCATCTCAGAACAAGCATGAAACCGGC
TCACATGATGCTGAGCGGCAGAATGAAGGTCAAGGAGTGGGAGAAATCAACATGGCAACTTCTGGTAAAT
GGTCAGGGTTCACTACACGAATGGACCATGAAACAGCCAGTGTGTTGAGTCTAGTAGCACACACTCT
GCACCTCGAAGGCTGACAAGTCATCTGGGAACCAAGGTGGAATGGTGTATTGTTGTTCAATGCTT
GGTACTCATGATAAGGATGATATGTCGCGAACTTTGCTAGCTATGCTAGCTCCCAAGACAGCTGTATA
TCCATGCGACAGTCTGGATGCTTCTCTCCTCATCCAGCTTTTACATGGCAATGACAAAAGACTCTGTA
TTGTTGGGAAATCCCAGGGCAGTAAAGAGGCTCGGGCCAGGGCCAGTGCAGCACTCCACAACATCATT
CACTCACAGCCTGATGACAAGAGAGGCAGGCGTGAATCCGAGTCCTTCATCTTTTGGAACAGATACGC
GCTTACTGTGAAACCTGTTGGGAGTGGCAGGAAGCTCATGAACCAGGCATGGACCAGGACAAAAATCCA
ATGCCAGTCTCTGTTGAACATCAGATCTGCTGCTGTGTGTGTTCTAATGAACTTTTCATTTGATGAA
GAGCATAGACATGCAATGAATGAACTAGGGGACTACAGGCCATTGCAGAATTATTGCAAGTGGACTGT
GAAATGTATGGGCTTACTAATGACCACTACAGTATTACACTAAGACGATATGCTGGAATGGCTTTGACA
```



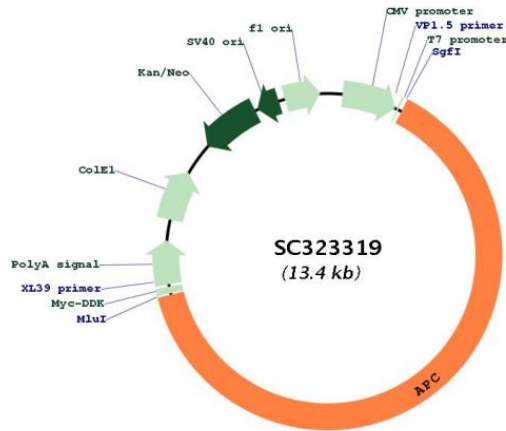
[View online »](#)

AACTTGACTTTTGGAGATGTAGCCAACAAGGCTACGCTATGCTCTATGAAAGGCTGCATGAGAGCACTT  
GTGGCCAACTAAAACTGAAAGTGAAGACTTACAGCAGGTTATTGCGAGTGTGTTTGGAGAAATTTGTCT  
TGGCGAGCAGATGTAATAGTAAAAAGACGTTGCGAGAAGTTGGAAGTGTGAAAGCATTGATGGAATGT  
GCTTTAGAAGTTAAAAAGGAATCAACCCCTAAAAGCGTATTGAGTGCCTTATGGAATTTGTCAGCACAT  
TGCCTGAGAATAAAGCTGATATATGTGCTGTAGATGGTGCCTTGCATTTTGGTTGGCACTTACT  
TACCGGAGCCAGACAAACTTTAGCCATTATTGAAAGTGGAGGTGGGATATTACGGAATGTGTCCAGC  
TTGATAGCTACAAATGAGGACCACAGGCAATCCTAAGAGAGAACAACCTGTCTACAACTTTATTACAA  
CACTTAAAACTCATAGTTTGCATAATAGTCAGTAATGCATGTGGAACCTTTGTGGAATCTCTCAGCAAGA  
AATCCTAAAGACCAGGAAGCATTATGGGACATGGGGCAGTTAGCATGCTCAAGAACCTCATTATTCA  
AAGCACAAAATGATTGCTATGGGAAGTGTGCAGCTTTAAGGAATCTCATGGCAATAGGCCTGCGAAG  
TACAAGGATGCCAATATTATGTCTCTGGCTCAAGCTTGCCTCTCTCATGTTAGGAAACAAAAAGCC  
CTAGAAGCAGAATTAGATGCTCAGCACTTATCAGAACTTTTGCATAATAGACAATTTAAGTCCCAAG  
GCATCTCATCGTAGTAAGCAGAGACACAAGCAAAGTCTCTATGGTGATTATGTTTTGACACCAATCGA  
CATGATGATAATAGTTCAGACAATTTAATACTGGCAACATGACTGTCCTTTACCATATTTGAATACT  
ACAGTGTACCCAGCTCCTCTTCAAGAGGAAGCTTAGATAGTTCTCGTTCTGAAAAAGATAGAAGT  
TTGAGAGAGAACCGGAATTGGTCTAGGCAACTACCATCCAGCAACAGAAAAATCCAGGAACTTCTTCA  
AAGCGAGGTTTGCAGATCTCCACCACTGCAGCCAGATTGCCAAAGTCATGGAAGAAGTGTGAGCCATT  
CATACCTCTCAGGAAGACAGAAGTTCTGGGTCTACCACTGAATTACATTGTGACAGATGAGAGAAAT  
GCCTTAGAAGAAGCTCTGCTGCCCATACACATTCAAACACTTACAATTTCACTAAGTCGGAAAAATTC  
AATAGGACATGTTCTATGCCTTATGCCAAATAGAATACAAGAGATCTTCAAATGATAGTTTAAATAGT  
GTCAGTAGTAGTATGGTTATGGTAAAAGAGGTCAAATGAAACCCCTCGATTGAATCCTATTCTGAAGAT  
GATGAAAGTAAGTTTTGCAGTTATGGTCAATACCCAGCCGACCTAGCCCATAAAAACATAGTCAAT  
CATATGGATGATAATGATGGAGAAGTACACCAATAAATATAGTCTTAAATATTAGATGAGCAG  
TTGAACTCTGGAAGGCAAGTCCTTACAGAAATGAAAGTGGGCAAGACCCAAACATAATAGAAGAT  
GAAATAAAAACAAAGTGAAGCAAGACAATCAAGGAATCAAAGTACAACCTTCTCTGTTTACTGAGAGC  
ACTGATGATAAACACCTCAAGTTCCAACCACTTTTGGACAGCAGGAATGTGTTTCTCCATACAGGTCA  
CGGGGAGCCAATGGTTCAGAAACAAATCGAGTGGGTTCTAATCATGGAATTAATCAAAATGTAAGCCAG  
TCTTTGTGTCAAGAAGATGACTATGAAGATGATAAGCCTACCAATATAGTGAACGTTACTCTGAAGAA  
GAACAGCATGAAGAAGAAGAGAGACCAACAAATATAGCATAAAATATAATGAAGAGAAACGTCATGTG  
GATCAGCCTATTGATTATAGTTTAAATATGCCACAGATATTCTTCATCACAGAAACAGTCATTTTCA  
TTCTCAAAGATTCTATCTGGACAAGCAGTAAAACCGAACATATGTCTTCAAGCAGTGAAGATACGTC  
ACACCTTCATCTAATGCCAAGAGGCAGAATCAGCTCCATCCAAGTTCTGCACAGAGTAGAAGTGGTCAG  
CCTCAAAGGCTGCCACTTGCAAAGTTTCTTCTATTAACCAAGAAACAATACAGACTTATTGTGTAGAA  
GATACTCCAATATGTTTTCAAGATGTAGTTTATTATCATCTTTGTGTCATCAGCTGAAGATGAAATAGGA  
TGTAATCAGACGACACAGGAAGCAGATTCTGCTAATACCTGCAATAGCAGAAATAAAGAAAAGATT  
GGAAGTGGTCAAGTGAAGATCCTGTGAGCGAAGTTCCAGCAGTGTACAGCACCCCTAGAACCAATCC  
AGCAGACTGCAGGTTCTAGTTTATCTTCAAGATCAGCCAGGCACAAAGCTGTGAAATTTCTTCAAGG  
CGGAAATCTCCCTCCAAAAGTGGTGTCTCAGACACCCAAAAGTCCACCTGAACACTATGTTCAAGGAGC  
CCACTCATGTTTAGCAGATGACTTCTGTGAGTCACTTGATAGTTTTGAGAGTCGTTCCGATTGCCAGC  
TCCGTTTCAAGTGAACCATGCAAGTGAAGTGGTAAGTGGCATTATAAGCCCCAGTATCTTCCAGATAGC  
CCTGGACAACCATGCCACCAAGCAGAAGTAAAACACCTCCACCACTCTCAAACAGCTCAAACCAAG  
CGAGAAGTACCTAAAAATAAAGCACCTACTGCTGAAAAGAGAGAGAGTGGACCTAAGCAAGTGCAGTA  
AATGCTGCAGTTCAGAGGTTCCAGGTTCTTCCAGATGCTGATACTTTATTACATTTTCCACGAAAGT  
ACTCCAGATGGATTTTCTGTTTCCAGCCTGAGTGTCTGAGCCTCGATGAGCCATTTATACAGAAA  
GATGTGGAATTAAGAATAATGCCTCCAGTTCAGGAAAAAGCAATGGGAATGAAACAGAATCAGAGCAG  
CCTAAAGAATCAAATGAAAACCAAGAGAAAGAGGCAGAAAAAACTATTGATTCTGAAAAGGACCTATTA  
GATGATTCAGATGATGATGATATTGAAATACTAGAAGAATGTATTATTTCTGCCATGCCAACAAAGTCA  
TCACGTAAGCAAAAAAGCCAGCCAGACTGCTTCAAATTAACCTCCACCTGTGGCAAGGAAACCAAGT  
CAGCTGCCTGTGTACAACTTCTACCATCACAACACAGTTGCAACCCCAAAAGCATGTTAGTTTTACA  
CCGGGGGATGATATGCCACGGGTGATTGTGTTGAAGGGACACCTATAAACTTTTCCACAGCTACATCT  
CTAAGTGTCTAACAATCGAATCCCTCCAAATGAGTTAGCTGTGGAGAAGGAGTTAGAGGAGGGGCA  
CAGTCAGGTGAATTTGAAAACGAGATACCATTCTACAGAAGGCAGAAGTACAGATGAGGCTCAAGGA

GGAAAAACCTCATCTGTAACCATACCTGAATTGGATGACAATAAAGCAGAGGAAGGTGATATTCTTGCA  
GAATGCATTAATTCTGCTATGCCAAAGGGAAAAGTCACAAGCCTTCCGTGTGAAAAAGATAATGGAC  
CAGGTCCAGCAAGCATCTGCGTCTTCTTCTGCACCCAACAAAAATCAGTTAGATGGTAAGAAAAAGAAA  
CCAACCTCACCAGTAAAACTATACCACAAAATACTGAATATAGGACACGTGTAAGAAAAATGCAGAC  
TCAAAAAATAATTTAAATGCTGAGAGAGTTTTCTCAGACAACAAAGATTCAAAGAAACAGAATTTGAAA  
AATAATTCCAAGGTCTTCAATGATAAGCTCCCAATAATGAAGATAGAGTCAGAGGAAGTTTTGCTTTT  
GATTCACCTCATCATTACACGCCTATTGAAGAACTCCTTACTGTTTTTACGAAATGATCTTTGAGT  
TCTCTAGATTTTGATGATGATGATGTTGACCTTCCAGGGAAAAGGCTGAATTAAGAAAGCAAAAAGAA  
AATAAGGAATCAGAGGCTAAAGTTACCAGCCACACAGAATAACCTCCAACCAACAAATCAGCTAATAAG  
ACACAAGCTATTGCAAAGCAGCCAATAAATCGAGGTGAGCCTAAACCCATACTTCAGAAACAATCCACT  
TTTCCCCAGTCATCAAAGACATACCAGACAGAGGGGACGCAACTGATGAAAAGTTACAGAATTTTGCT  
ATTGAAAATACTCCGTTTGTCTTCTCATAATCCTCTCTGAGTTCTCTCAGTGACATTGACCAAGAA  
AACACAATAAAGAAAAATGAACCTATCAAAGAGACTGAGCCCCCTGACTCACAGGGAGAACCAAGTAAA  
CCTCAAGCATCAGGCTATGCTCCTAAATCATTTCATGTTGAAGATACCCAGTTTGTCTCAAGAAAC  
AGTTCTCTCAGTTCTTCTAGTATTGACTCTGAAGATGACCTGTTGCAGGAATGTATAAGCTCCGCAATG  
CCAAAAAGAAAAAGCCTTCAAGACTCAAGGGTGATAATGAAAAACATAGTCCCAGAAATATGGGTGGC  
ATATTAGGTGAAGATCTGACACTTGATTTGAAAGATATACAGAGACCAGATTCAGAACATGGTCTATCC  
CCTGATTCAGAAAATTTTGATTGGAAAGCTATTGAGGAAGGTGCAAATCCATAGTAAGTAGTTTACAT  
CAAGCTGCTGCTGCTGCATGTTTATCTAGACAAGCTTCGTCTGATTCAGATTCATCCTTTCCCTGAAA  
TCAGGAATCTCTCTGGGATCACCATTTCATCTTACACCTGATCAAGAAGAAAAACCTTTACAAGTAAT  
AAAGGCCACGAATCTAAAACAGGGGAGAAAAGTACATTGGAACTAAAAAGATAGAATCTGAAAGT  
AAAGGAATCAAAGGAGGAAAAAAGTTTATAAAGTTTGATTACTGAAAAGTTTCGATCTAATTCAGAA  
ATTTTCAGGCCAAATGAAACAGCCCCCTCAAGCAACATGCCTTCAATCTCTCGAGGCAGGACAATGATT  
CATATTCCAGGAGTTTCAAAATAGCTCCTCAAGTACAAGTCTGTTTCTAAAAAGGCCCAACCTTAAAG  
ACTCCAGCCTCCAAAAGCCTTAGTGAAGGTCAAACAGCCACCCTTCTCCTAGAGGAGCCAAAGCCATCT  
GTGAAATCAGAATTAAGCCCTGTTGCCAGGCAGACATCCCAAATAGGTGGGTCAAGTAAAGCACCTTCT  
AGATCAGGATCTAGAGATTCGACCCCTTCAAGACTGCCAGCAACCTAAGTAGACCTATACAGTCT  
CCTGGCCGAAACTCAATTTCCCTGGTAGAAATGGAATAAGTCTCCTAACAATATCTCAACTCCA  
AGGACATCATCCCTAGTACTGCTTCAACTAAGTCTCAGGTTCTGAAAAATGCATATACATCTCCA  
GGTAGACAGATGAGCCAACAGAACCTTACCAAACAACAGGTTTATCCAAGAATGCCAGTAGTATCCA  
AGAAGTGAGTCTGCCTCCAAAGGACTAAATCAGATGAATAATGGTAATGGAGCCAATAAAAAGGTAGAA  
CTTTCTAGAATGTCTTCAACTAAATCAAGTGAAGTGAATCTGATAGATCAGAAAGACCTGTATTAGTA  
CGCCAGTCAACTTTCATCAAAGAAGCTCCAAGCCAACTTAAAGAAGAAAATTGGAGGAATCTGCTTCA  
TTTGAATCTTTTCTCCATCATCTAGACCAGCTTCTCCACTAGGTCCCAGGCACAAAACCTCAGTTTAA  
AGTCTTCCCTTCTGATATGCTCTATCCACACATTCGTCTGTTGAGGCTGGTGGATGGCGAAAACCTC  
CCACCTAATCTCAGTCCCACTATAGAGTATAATGATGGAAGACCAGCAAAGCGCCATGATATTGCACGG  
TCTCATTCTGAAAGTCTTCTAGACTTCCAATCAATAGGTGAGAACCTGGAAACGTGAGCACAGCAAA  
CATTTCATCATCCCTTCTCGAGTAAGCACTTGGAGAAGAACTGGAAGTTCATCTTCAATTTCTTCTGCT  
TCATCAGAATCCAGTAAAAAGCAAAAAGTGGAGTAAAAACATGTGAACCTATTTTCAGGAACCAAA  
CAAAGTAAAGAAAACCAAGTATCCGCAAAAAGGAACATGGAGAAAAATAAAAAGAAAATGAATTTTCTCCC  
ACAAATAGTACTTCTCAGACCGTTTCTCAGGTGCTACAATGGTGTGAATCAAAGACTCTAATTTAT  
CAAATGGCACCTGCTGTTTCTAAAACAGAGGATGTTTGGGTGAGAATTGAGGACTGTCCCATTAACAAT  
CCTAGATCTGGAAGATCTCCACAGGTAATACTCCCCGGTGATTGACAGTGTTCAGAAAAGGCAAAAT  
CCAAACATTAAGATTCAAAGATAATCAGGCAAAAACAAATGTGGTAATGGCAGTGTTCATGCGT  
ACCGTGGGTTTGGAAAATCGCCTGAACCTTTTATTCAGGTGGATGCCCTGACCAAAAAGGAACTGAG  
ATAAAAACCAGGACAAAATAATCCTGTCCCTGTATCAGAGACTAATGAAAGTTCTATAGTGAACGTACC  
CCATTGAGTTCTAGCAGCTCAAGCAACACAGTTCACCTAGTGGGACTGTTGCTGCCAGAGTGACTCCT  
TTTAATTACAACCAAGCCCTAGGAAAAGCAGCGCAGATAGCACTTCAGCTCGGCCATCTCAGATCCCA  
ACTCCAGTGAATAACAACACAAAAGGAGGATTCAAAACACTGACAGCACAGAATCCAGTGAACCCAA  
AGTCTAAGCGCCATTCTGGGTCTTACCTGTGACATCTGTTTAA  
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT  
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

**Restriction Sites:** Sgfl-MluI

**Plasmid Map:**



**ACCN:** NM\_001127510

**Insert Size:** 8532 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).

**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:** [NM\\_001127510.2](#)

**RefSeq Size:** 10848 bp

**RefSeq ORF:** 8532 bp

**Locus ID:** 324

**UniProt ID:** [P25054](#)

<b>Cytogenetics:</b>	5q22.2
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Basal cell carcinoma, Colorectal cancer, Endometrial cancer, Pathways in cancer, Regulation of actin cytoskeleton, Wnt signaling pathway
<b>MW:</b>	311.6 kDa
<b>Gene Summary:</b>	<p>This gene encodes a tumor suppressor protein that acts as an antagonist of the Wnt signaling pathway. It is also involved in other processes including cell migration and adhesion, transcriptional activation, and apoptosis. Defects in this gene cause familial adenomatous polyposis (FAP), an autosomal dominant pre-malignant disease that usually progresses to malignancy. Mutations in the APC gene have been found to occur in most colorectal cancers. Disease-associated mutations tend to be clustered in a small region designated the mutation cluster region (MCR) and result in a truncated protein product. [provided by RefSeq, Dec 2019]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR, lacks a portion of the 5' coding region, and initiates translation at an alternate start codon, compared to variant 1. This variant also contains an alternate in-frame exon compared to variant 1. The encoded isoform (b) has a distinct N-terminus and is longer than isoform a. Variants 2, 3, and 4 all encode the same isoform (b).</p>