

Product datasheet for **SC125783**

RAP1GAP (NM_002885) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RAP1GAP (NM_002885) Human Untagged Clone
Tag:	Tag Free
Symbol:	RAP1GAP
Synonyms:	RAP1GA1; RAP1GAP1; RAP1GAPII; RAPGAP
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene sequence for NM_002885 edited

```

TTCGGGGCCTACGGCGGGGTGGACAAGTCCTTCACTTCTCGCCGGAGTGTGTGGAGGAGC
GATGGGCAGAACACGACTTCCCTCAGGCACTAGACCTGTCACGAGTGAACCTAGTTCCC
TCCTATACTCCTTCACTCTACCCTAAGAACACAGATCTATTTGAGATGATTGAGAAGATG
CAGGGAAGCAGGATGGATGAACAACGCTGCTCCTTCCCGCCGCCCTCAAAACAGAGGAG
GACTACATTCCATACCCGAGCGTGCACGAGGTCTTGGGGCGAGAAGGACCCTTCCCCCTC
ATCCTGCTGCCCCAGTTTGGGGGCTACTGGATTGAGGGCACCAACCACGAAATCACCAGC
ATCCCCGAGACAGAGCCACTGCAGTCGCCCACAACCAAGGTGAAGCTCGAGTGCAACCCC
ACAGCCCCGATCTACCGGAAGCACTTTCTCGGAAGGAGCATTTCATTACTACTCACTG
GACGCTGCCCTCGGCCACCTTGCTTCTCACTCAAGTACGATGTCATCGGGGACCAAGAG
CACCTGCGGCTGCTGCTCAGGACCAAGTGCCGGACATACCATGATGTCATCCCCATCTCC
TGCTCACCAGATTCCCTAATGTTGTCCAGATGGCAAAGTTGGTGTGTGAAGACGTCAT
GTGGATCGGTTCTATCCTGTGCTCTACCCCAAGGCTTCCCGGCTCATCGTCACCTTTGAC
GAGCATGTCATCAGCAATAACTTCAAGTTTGGCGTCATTTATCAGAAGCTTGGGCAGACC
TCCGAGGAAGAACTCTTCAGCACCAATGAGGAAAGTCCCGCTTTCGTGGAGTTCTTTGAA
TTTCTTGCCAGAAGGTCAAAGTGCAGGACTTTAAGGGTTCCGAGGAGGCTGGACGTG
ACCCACGGGCAGACGGGGACCGAATCTGTGTACTGCAACTTCCGCAACAAGGAGATCATG
TTTCACGTGTCCACCAAGCTGCCATACACGGAAGGGGACGCCAGCAGTTGCAGCGGAAG
CGGCACATCGGGAACGACATCGTGGCTGTGGTCTTCCAGGATGAGAACAACCTCCTCTCGTG
CCCGACATGATCGCGTCCAACCTTCTGCATGCCTACGTCTGTGGTGCAGGCTGAGGGCGGG
GGCCCTGATGGCCCCCTCTACAAGGTCTCTGTCACTGCAAGAGATGATGTGCCCTTCTTT
GGACCCCCCTCCCGGACCCCGCTGTGTTCAAGGAGGGGCTGAGTTCCAGGAATTTTGTG
CTGACAAAGCTGATCAATGCTGAATATGCCTGCTACAAGGCAGAGAAGTTTGCCAACTG
GAGGAGCGGACGCGGGCCGCCCTCCTGGAGACGCTCTATGAGGAACACATCCACAGC
CAGTCCATGATGGGCTTGGGCGGCGACGAGGACAAGATGGAGAATGGCAGTGGGGCGGC
GGCTTCTTTGAGTCTTTCAAGCGGGTCTCCGGAGCCGACGACGTCATGGATGCCATG
GGGCTGAGCAACAAGAAGCCCAACACCGTGTCCACCAGCCACAGCGGGAGCTTCGCGCCC

```



[View online »](#)

AACAAACCCCGACCTGGCCAAGGCGGCTGGAATATCACTGATTGTCCCTGGGAAGAGCCCC
 ACGAGGAAGAAGTCGGGCCCCGTTCCGGCTCCCGCCGAGCAGCGCCATTGGCATCGAGAAC
 ATACAGGAGGTGCAGGAGAAGAGGGAGAGCCCTCCGGCTGGTCAGAAGACCCAGACAGC
 GGGCAGTCTCACAGGAGCCCAAGTCGGAGAACTCATCCACTCAGAGCTCCCGAGAGATG
 CCCACGACCAAGAAGCAGAGCGGAGACCGCAGCGCAGAGAGCAGAGGCGCTCAAGGACTTC
 TCCCGCTCCTCGTCCAGTGCCAGCAGCTTCGCCAGCGTGGTGGAGGAGACGGAGGGTGTG
 GACGGAGAGGACACAGGCTGGAGAGCGTGTATCCTCAGGAACACCCCAAGCGGGAC
 TCCTTCATCTATAGCACGTGGCTGGAGGACAGTGTGAGCACCAGTGTGGGGGACGCTCC
 CCAGGCCCCCTCTCGATCACCCACCCAGACGCCGCAAGTTGGGGGACCTGCGTGTCCC
 GAGATCAAGATCCAGCTGGAAGCATCTGAGCAGCACATGCCCCAGCTGGGCTGTTAGCCG
 GGCCACCCCTCTGAAGGTGAACTGAGCAGATGAGGCCACAGAAGCACAAGGGGAAGGT
 GCCGTGTCAAGCCAGGACAGACGAGACCTCTGCCCTGAAGACCAACACCAGCCCTGGGC
 TGCCCCCTGCCTCCCCACCTCCCATGGCCACCCATCTGGGCTGTCTCTGCAGGGCAG
 AGCCGTCCAGACCTGGGATCAGGAAGCTGCTGGCATCGTCCCCACCCAGCCTGGGGG
 TCTGGGCTGGGGCAGGATTGCTCAGTGAAGCAGGACTGGGGGTCTGGCTTGCCCCCTC
 CCTGGGCTCCATCACCCCTGAGCATCCCTCTGGAAGTCTGAGGGAACAAGGTGGGAGAGA
 GAGTTTGAGACAGCTCCGTGTGGAGAGCTTAGCCCTGGAGGCAGCACAAGGAGGATGTG
 ATATGTGGGGAGTGAGCACTGGGTTGGGAGCCGGGCTCTGGTTTCAATTTGGGTTCTG
 CTGTGTGACTCTGGCAAGTCACTCTCCCTCTCTGGGCATGTCTGCTACAAATGGACAAG
 ATTATTTAGAGGTCACTGAAGACTGTGATTACATGCACCTGCCTTAGAAGGTAGGATTT
 TCTTCCAGGGACCTCTATCACCTACCTGCTTCTTGGAGTCCCTGGAGCCCCAGGTG
 GGCTGAGGGGACAGGAGCCGGCTGTGCCAGTATGCCTCCTGGACCTCCAGTTCTGCCA
 CAGGTCTGCCGATGCCCTGTCCACTGCCTACACATGACAGACAAGTAACCCCTCATGGG
 GGATGGGGACCTACCTGGCTCCTCAGCCAGCACCAGCTTAACCCCTGCCATCCCATGCT
 GGGCCCTCCAGGCAAGAGTCTCAGCTGGCCGAGAGTCCAGGCCTTGCCTCCCCGACCG
 CCATGGAGGGGACAGCCGGCAGAGCTGCTGGGAGCCCTTGTGTGTCTGGTCACACTTTT
 TAGGCGTCACGCCAAAGGCCAGCCTCTGGCCCCAATACCCATTTTGAAGCCCCGTGGG
 CCGTGTGGATGTCGGTAACAGTTGTATAAAATAAATTCTATTTATCGCTATTGTAAAAA
 AA
 AAAAAAAAAAAAAAAAAAAAAAAAAAAAA

**5' Read Nucleotide
Sequence:**

>OriGene 5' read for NM_002885 unedited
 TCTGAATTGTATACGACTCATATAGGCGGACCGCAATCANATCTGGTACCGGTCCGGA
 TTCCCGGATTTCGGGGCTACGGCGGGTGGACAAGTCTTCACTTCTCGCCGGAGTGT
 GTGGAGGAGCGATGGGCAGAACCAGCACTTCCCTCAGGCACTAGACCTGTACAGAGTGA
 CTTAGTTCCTCTATACTCCTTCACTCTACCCTAAGAACACAGATCTATTTGAGATGAT
 TGAGAAGATGCAGGGAAGCAGGATGGATGAACAACGCTGCTCCTCCCGCCGCCCTCAA
 AACAGAGGAGGACTACATTCCATACCCGAGCGTGCACGAGGTCTTGGGGCAGAAAGGACC
 CTTCCCCCTCATCTGCTGCCCAAGTTTGGGGGCTACTGGATTGAGGGCACCAACCACGA
 AATCACACAGCATCCCCGAGACAGAGCCACTGCAGTCGCCCAACAACCAAGGTGAAGCTCGA
 GTGCAACCCACAGCCCGCATCTACCGGAAGCACTTTCTCGGCAAGGAGCATTTCAATTA
 CTACTCACTGGACGCTGCCCTCGCCACCTTGTCTTCACTCAAGTACGATGTCATCGG
 GGACCAAGAGCAGCTGCCGCTGTGCTCAGGACCAAGTGCCGACATACCATGATGTCAT
 CCCCATCTCCTGCCTCACCGAGTTCCTAATGTTGTCCAGATGGCANAGTTGGTGTGTGA
 AGAGCTCAATGTGGATTCTTCTATCCTGTGCTCTACCCAGGGCTCCCGGCTCATCGTC
 ACCTTTGACGAGCATGTATCAGCAATAACTTCAAGTTTGGCGTCATTTATCAGAAGCTT
 GGGCAGACCTCCGAGGAAGACTTTCAGCACAATGANGAAGTCCCGCTTTCGTGGAGTT
 CCTGAATTTNCTTGCCAGAGTCAACTGCAGACTTTAGGGGT

Restriction Sites:

NotI-NotI

ACCN:

NM_002885

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.
RefSeq:	NM_002885.1 , NP_002876.1
RefSeq Size:	3270 bp
RefSeq ORF:	1992 bp
Locus ID:	5909
UniProt ID:	P47736
Cytogenetics:	1p36.12
Gene Summary:	This gene encodes a type of GTPase-activating-protein (GAP) that down-regulates the activity of the ras-related RAP1 protein. RAP1 acts as a molecular switch by cycling between an inactive GDP-bound form and an active GTP-bound form. The product of this gene, RAP1GAP, promotes the hydrolysis of bound GTP and hence returns RAP1 to the inactive state whereas other proteins, guanine nucleotide exchange factors (GEFs), act as RAP1 activators by facilitating the conversion of RAP1 from the GDP- to the GTP-bound form. In general, ras subfamily proteins, such as RAP1, play key roles in receptor-linked signaling pathways that control cell growth and differentiation. RAP1 plays a role in diverse processes such as cell proliferation, adhesion, differentiation, and embryogenesis. Alternative splicing results in multiple transcript variants encoding distinct proteins. [provided by RefSeq, Aug 2011] Transcript Variant: This variant (3) differs in the 5' UTR and lacks an alternate in-frame exon compared to variant 4. The resulting isoform (c) has the same N- and C-termini but is shorter compared to isoform d. Variants 3 and 8 encode the same protein (isoform c)/ Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.