

Product datasheet for **RC215258**

SAP97 (DLG1) (NM_004087) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SAP97 (DLG1) (NM_004087) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SAP97
Synonyms:	DLGH1; hdlg; SAP-97; SAP97
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC215258 representing NM_004087
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCGGTCCGGAAGCAAGATACCCAGAGAGCATTGCACCTTTTGGAGGAATATCGTTCAAACCTAAGCC
 AAACCTGAAGACAGACAGCTCAGAAGTTCCATAGAACGGGTTATTAACATATTTTCAGAGCAACCTCTTTCA
 GGCTTTAATAGATATTCAGAATTTTATGAAGTGACCTTACTGGATAATCCAAAATGTATAGATCGTTCA
 AAGCCGCTGAACCAATTC AACCTGTGAATACTTGGGAGATTTCCAGCCTTCCAAGCTCTACTGTGACTT
 CAGAGACTGCCAAGCAGCCTTAGCCCTAGTGTAGAGAAATACAGGTATCAGGATGAAGATACACCTCC
 TCAAGAGCATATTTCCCAAAAATCACAATGAAGTGATAGGTCCAGAATGGTTCATGTCTCAGAGAAG
 AACTTATCAGAGATTGAGAAATGTCATGGATTTGTTTCTCATTCTCATATTTACCAATAAAGCCAAACAG
 AAGCTGTTCTTCCCTCTCTCCACTGTCCCTGTGATCCCTGTCCCTGCCAGTCCCTGCTGAGAATACTGT
 CATCTACCCACCATAACACAGGCAAACTCTCCCCAGTACTGGTCAACACAGATAGCTTGGAAACACCA
 ACTTACGTTAATGGCACAGATGCAGATTATGAATATGAAGAAATCACACTTGAAGGGGAAATTCAGGGC
 TTGGTTTCAGCATTGCAGGAGGTACGGACAACCCACACATTGGAGATGACTCAAGTATTTTCATTACCAA
 AATTATCACAGGGGGAGCAGCCGCCAAGATGGAAGATTGCGGGTCAATGACTGTATATTACGAGTAAAT
 GAAGTAGATGTTCTGTATGTAACACATAGCAAAGCAGTTGAAGCGTTGAAAGAAGCAGGGTCTATTGTAC
 GCTTGTATGTA AAAAGAAGGAAACCAAGTGTGAGAAAAAATGGAATAAAGCTCATTAAAGGTCCTAA
 AGGTCTGGGTTTAGCATTGCTGGAGGTGTTGGAATCAGCATATTCCTGGGGATAATAGCATCTATGTA
 ACCAAAAAATGAAGGAGGTGCAGCACATAAGGATGGCAAACCTCAGATTGGAGATAAACTTTTAGCAG
 TGAATAACGTATGTTTGAAGAAGTTACTCATGAAGAAGCAGTAACTGCCTTAAAGAACACATCTGATTT
 TGTTTATTTGAAAGTGGCAAAACCCACAAGTATGTATATGAATGATGGCTATGCACCACCTGATATCACC
 AACTCTTCTTCTCAGCCTGTTGATAACCATGTTAGCCCATCTTCTTCTTGGGCCAGACACCAGCATCTC
 CAGCCAGATACTCCCGAGTTTCTAAAGCAGTACTTGGAGATGATGAAATTAACAAGGGAACCTAGAAAAGT
 TGTTCTTCATCGTGGCTCAACGGGCTTGGTTCAACATTGTAGGAGGAGAAGATGGAGAAGGAATATTT
 ATTTCTTTATCTTAGCCGGAGGACCTGCTGATCTAAGTGGAGAGCTCAGAAAAGGAGATCGTATTATAT
 CGGTAACAGTGTGACCTCAGAGCTGCTAGTCATGAGCAGGCAGCAGCTGCATTGAAAAATGCTGGCCA
 GGCTGTCACAATGTTGCACAATATCGACCTGAAGAATACAGTCGTTTTGAAGCTAAAATACATGATTTA
 CGGGAGCAGATGATGAATAGTAGTATTAGTTT CAGGGT CAGGTTCTCTTGAAGTAAATACATGATTTA
 TCTATGTCAGAGCCCTTTTTGATTATGACAAGACTAAAGACAGTGGGCTTCCAGT CAGGGACTGAACCT
 CAAATTTGGAGATATCCTCCATGTTATTAATGCTTCTGATGATGAATGGTGGCAAGCCAGGCAGGTTACA
 CCAGATGGTGAGAGCGATGAGGTCCGAGTGATCCCGAGTAAACGCAGAGTTGAGAAGAAAGAACGAGCCC
 GATTA AAAACAGTGAAATTC AATTCTAAAACGAGAGATAAAGGGCAGTCAATTCAATGACAAGCGTAAAAA
 GAACCTCTTTCCGAAAATTCCTTCTACAAGAACAAGGACCAGAGTGAGCAGGAAACAAGTGTGCT
 GACCAGCATGTAACCTCTAATGCCAGCGATAGTGAAGTAGTTACCGTGGTCAAGAAGAATACGTCTTAT
 CTTATGAACCAGTGAATCAACAAGAAGTTAATTACTCGACCAGTGTATCATATTTGGACCTATGAAAGA
 CAGGATAAATGATGACTTGATCTCAGAATTTCTGACAAAATTTGGATCCTGTGTTCTCATACAATA
 CAAAACGAGATTATGAGGTAGATGGAAGAGATTATCATTGTTGACTTCAAGAGAGCAGATGGA AAAAG
 ATATCCAGGAACATAAATTCATTGAAGCTGGCCAGTATAACAATCATCTATATGGAACAAGTGTTAGTC
 TGTACGAGAAGTAGCAGAAAAGGCAAACACTGTATCCTTGATGTGTCTGGAAATGCCATAAAGAGATTA
 CAGATTGCACAGCTTTACCCTATCTCCATTTTTATTAACCCAAATCCATGGAAAATATCATGGAATGA
 ATAAGCGTCTAACAGAAGAACAAGCCAGAAAACATTTGAGAGGCCATGAAACTGGAACAGGAGTTTAC
 TGAACATTTACAGCTATTGTACAGGGGATACGCTGGAAGACATTTACAACCAAGTGAACAGATCATA
 GAAGAACAATCTGGTCTTACATCTGGGTTCCGGCAAAAGAAAAGCTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGAT AAGGTTTAA

Protein Sequence: >RC215258 representing NM_004087
 Red=Cloning site Green=Tags(s)

MPVVRKQDTQRALHLLLEEYRSKLSQTEDRQLRSSIERVINIFQSNLFQALIDIQEFYEVTLLDNPKCIDRS
 KPSEPIQPVNTWEISSLPSTVTSETLPSSLSPSVEKYRYQDETPPQEHISPOITNEVIGPELVHVSEK
 NLSEIENVHGFVSHSHISPIKPTAEVLPSPPTVPVIVLPVPAENTVILPTIPQANPPPVLVNTDSLETP
 TVVNGTDADYEYEEITLERGNSGLGFSGIAGGTDNPHIGDDSSIFITKIIITGGAAAQDGRRLRVNDCILRVN
 EVDVDRDVTHSKAVEALKEAGSIVRLYVRRKPVSEKIMEIKLIKGPKGLGFSGIAGGVGNQHIPGDNSIYV
 TKIIIEGGAHKDKGLQIGDKLLAVNNVLEEVTHEEAVTALKNTSDFVYLKVAKPTSMYMNDDGYAPPDIT
 NSSSQPVDNHVSPSSFLGQTPASPARYSPVSKAVLGDDEITREPRKVVLHRGSTGLGFNIVGGEDGEGIF
 ISFILAGGPADLSGELRKGDRIIISVNSVDLRAASHEQAAAALKNAGQAVTIVAQYRPEEYSRFEAKIHDL
 REQMMNSSISSGSGSLRTSQKRSLYVRALFDYDKTKDGLPSQGLNFKFGDILHVINASDDEWWQARQVT
 PDGESDEVGVIPSKRRVEKKERARLKTVKFNSKTRDKGQSFNDRKKNLFSRKFPFYKNKDQSEQETS
 DAQHVTSNASDSESSYRGQEEYVLSYEPVNQQEVNYTRPVIILGPMKDRINDDLISEFPDKFGSCVPHTTR
 PKRDYEVDRDYHFVTSREQMEKDIQEHKFEAGQYNNHLYGTSVQSVREVAEKGKHCILDVSGNAIKRL
 QIAQLYPIISIFIKPKSMENIMEMNKRLTEEQARKTFERAMKLEQEFTEHFTAIVQGDTLIEDIYNQVKQII
 EEQSGSYIWWPAKEKL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja2511_c08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_004087

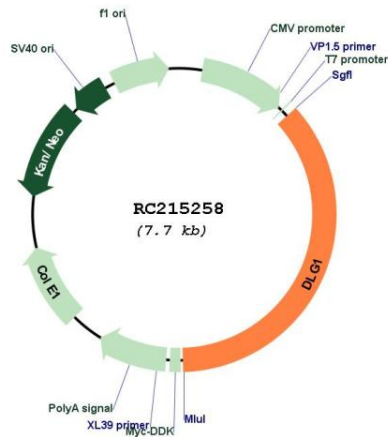
ORF Size: 2778 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
OTI Annotation:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>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).</p>
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:	<p>NM_004087.2, NP_004078.2</p>
RefSeq Size:	<p>5034 bp</p>
RefSeq ORF:	<p>2781 bp</p>
Locus ID:	<p>1739</p>
UniProt ID:	<p>Q12959</p>
Cytogenetics:	<p>3q29</p>
Domains:	<p>SH3, PDZ, L27, Guanylate_kin, GuKc</p>
Protein Families:	<p>Druggable Genome</p>
Protein Pathways:	<p>T cell receptor signaling pathway</p>
MW:	<p>103.8 kDa</p>

Gene Summary:

This gene encodes a multi-domain scaffolding protein that is required for normal development. This protein may have a role in septate junction formation, signal transduction, cell proliferation, synaptogenesis and lymphocyte activation. A multitude of transcript variants deriving from alternative splicing and the use of multiple alternate promoter have been observed, including some splice variants that may be specific to brain and other tissues. An upstream uORF may regulate translation at some splice variants of this gene. [provided by RefSeq, Sep 2018]

Product images:



Circular map for RC215258