

## Product datasheet for **RG233162**

### **SAP97 (DLG1) (NM\_001204386) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	SAP97 (DLG1) (NM_001204386) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DLG1
Synonyms:	DLGH1; hdlg; SAP-97; SAP97
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG233162 representing NM\_001204386  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCCGGTCCGGAAGCAAGATACCCAGAGAGCATTGCACCTTTTGGAGGAATATCGTTCAAACCTAAGCC  
 AAAGTGAAGACAGACAGCTCAGAAGTTCCATAGAACGGGTATTAAACATATTTCCAGAGCAACCTCTTTCA  
 GGCTTTAATAGATATTCAGAATTTTATGAAGTGACCTTACTGGATAATCCAAAATGTATAGATCGTTCA  
 AAGCCGTCTGAACCAATCAACCTGTGAATACTTGGGAGATTTCCAGCCTTCCAAGCTCTACTGTGACTT  
 CAGAGACTGCCAAGCAGCCTTAGCCCTAGTGTAGAGAAATACAGGTATCAGGATGAAGATACACCTCC  
 TCAAGAGCATATTTCCCAAAAATCACAATGAAGTGATAGGTCCAGAATTGGTTCATGTCTCAGAGAAG  
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 CTCGCCAGTACTGGTCAACACAGATAGCTTGGAAACACCAACTACGTTAATGGCACAGATGCAGATTA  
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 ATGGAAGATTGCGGGTCAATGACTGTATATTACGAGTAAATGAAGTAGATGTTCTGTGATGAACACATAG  
 CAAAGCAGTTGAAGCGTTGAAAGAAGCAGGGTCTATTGTACGCTTGTATGTAAGAAAGAAAGAACAGTG  
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 CATGAAGAAGCAGTAACGCCTTAAAGAACACATCTGATTTTGTATTTGAAAGTGGCAAAACCCACAA  
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 TGTTAGCCCATCTTCTTCTGGGCCAGACACCAGCATCTCCAGCCAGATACTCCCAAGTTTCTAAAGCA  
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 AGTCATGAGCAGGCAGCAGCTGCATTGAAAAATGCTGGCCAGGCTGTACAATTGTTGCACAATATCGAC  
 CTGAAGAATACAGTCGTTTTGAAGCTAAAATACATGATTTACGGGAGCAGATGATGAATAGTAGTATTAG  
 TTCAGGGTCAGGTTCTCTCGAACTAGCCAGAAGCGATCCCTCTATGTCAGAGCCCTTTTGGATTATGAC  
 AAGACTAAAGACAGTGGGCTTCCAGTCAGGGACTGAACCTCAAATTTGGAGATATCCTCCATGTTATTA  
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 CAGTATAACAATCATCTATATGGAACAAGTGTTCAGTCTGTACGAGAAGTAGCAGAAAAAGGGCAAACT  
 GTATCCTTGATGTGTCTGAAATGCCATAAAGAGATTACAGATTGCACAGCTTTACCCTATCTCCATTTT  
 TATTAACCCAAAATCCATGGAAAATATCATGGAATGAATAAGCGTCTAACAGAAGAACAAGCCAGAAAA  
 ACATTTGAGAGAGCCATGAAACTGGAACAGGAGTTTACTGAACATTTACAGCTATTGTACAGGGGGATA  
 CGCTGGAAGACATTTACAACCAAGTGAACAGATCATAGAAGAACAATCTGGTCTTACATCTGGTTCC  
 GGCAAAAGAAAAGCTA

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – **GTTTAA**

Protein Sequence: >RG233162 representing NM\_001204386  
 Red=Cloning site Green=Tags(s)

MPVRKQDTQRALHLL E E Y R S K L S Q T E D R Q L R S S I E R V I N I F Q S N L F Q A L I D I Q E F Y E V T L L D N P K C I D R S  
 K P S E I Q P V N T W E I S S L P S S T V T S E T L P S S L S P S V E K Y R Y Q D E T P P Q E H I S P Q I T N E V I G P E L V H V S E K  
 N L S E I E N V H G F V S H S H I S P I K A N P P P V L V N T D S L E T P T Y V N G T D A D Y E Y E E I T L E R G N S G L G F S I A G G T D  
 N P H I G D D S S I F I T K I I T G G A A A Q D G R L R V N D C I L R V N E V D R V D V T H S K A V E A L K E A G S I V R L Y V K R R K P V  
 S E K I M E I K L I K G P K L G F S I A G G V G N Q H I P G D N S I Y V T K I I E G G A A H K D G K L Q I G D K L L A V N N V C L E E V T  
 H E E A V T A L K N T S D F V Y L K V A K P T S M Y M N D G Y A P P D I T N S S S Q P V D N H V S P S S F L G Q T P A S P A R Y S P V S K A  
 V L G D D E I T R E P R K V V L H R G S T G L G F N I V G G E D G E G I F I S F I L A G G P A D L S G E L R K G D R I I S V N S V D L R A A  
 S H E Q A A A A L K N A G Q A V T I V A Q Y R P E E Y S R F E A K I H D L R E Q M M N S S I S S G S G L R T S Q K R S L Y V R A L F D Y D  
 K T K D S G L P S Q G L N F K F G D I L H V I N A S D D E W W Q A R Q V T P D G E S D E V G V I P S K R R V E K K E R A R L K T V K F N S K  
 T R D K G S F N D K R K K N L F S R K F P F Y K N K D Q S E Q E T S D A D Q H V T S N A S D S E S S Y R G Q E E Y V L S Y E P V N Q Q E V N  
 Y T R P V I I L G P M K D R I N D D L I S E F P D K F G S C V P H T T R P K R D Y E V D G R D Y H F V T S R E Q M E K D I Q E H K F I E A G  
 Q Y N N H L Y G T S V Q S V R E V A E K G K H C I L D V S G N A I K R L Q I A Q L Y P I S I F I K P K S M E N I M E M N K R L T E E Q A R K  
 T F E R A M K L E Q E F T E H F T A I V Q G D T L E D I Y N Q V K Q I I E E Q S G S Y I W P A K E K L

TRTRPLE - GFP Tag - V

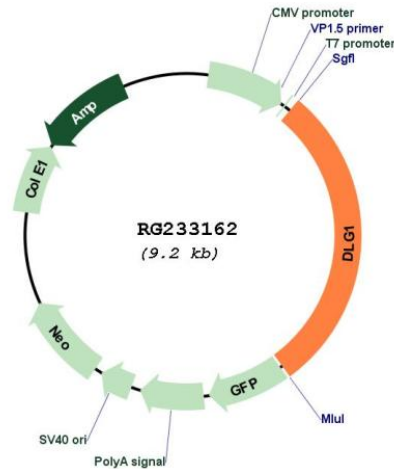
Restriction Sites:

SgfI-MluI

Cloning Scheme:



## Plasmid Map:



ACCN: NM\_001204386

ORF Size: 2676 bp

OTI Disclaimer: 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 clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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\\_001204386.1](#), [NP\\_001191315.1](#)

RefSeq Size: 4941 bp

RefSeq ORF: 2679 bp

Locus ID: 1739

UniProt ID: [Q12959](#)

Cytogenetics: 3q29

**Protein Families:** Druggable Genome

**Protein Pathways:** T cell receptor signaling pathway

**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]