

Product datasheet for **MG227405**

Dlg4 (NM_007864) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dlg4 (NM_007864) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dlg4
Synonyms:	Dlgh4; PSD-95; PSD95; SAP90; SAP90A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG227405 representing NM_007864
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGACTGTCTGTATAGTGACAACCAAGAAATACCGCTACCAAGATGAAGACACGCCCCCTCTGGAAC
 ACAGCCCGGCCACCTCCCAACCAGGCCAATTCTCCCCCTGTGATTGTCAACACGGACACCCTAGAAGC
 CCCAGGATATGAGTTGCAGGTGAACGGAACAGAGGGGAGATGGAGTATGAGGAGATCACATTGGAAGG
 GGTAACTCAGGTCTGGGCTTCAGCATCGCAGGTGGCACCACACACATCGGTGACGACCCATCCA
 TCTTTATACCAAGATCATTCTGGTGGGGCTGCAGCCAGGATGGCCGCCTCAGGGTCAACGACAGCAT
 CCTGTTTGTCAATGAAGTGGATGTCGGGAGGTGACCCATTACAGTGCAGTGGAGGCCCTCAAAGAGGCG
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 AAGATCCTGGCGGTCAACAGTGTGGGGTAGAGGATGTCATGCATGAGGACGCCCTGGCAGCCCTGAAGA
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 CCCAGACATCACAACTCATATTCTCAGCACCTGGACAATGAGATCAGTCATAGCAGCTACTTGGGCACC
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 CCTCCCGGAGAAAATGGAGAAGGACATTCAGGCGCACAAAGTTTATTGAGGCTGGCCAGTACAACAGCCA
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 CCCTGGAGAATGTGCTAGAGATCAATAAGCGGATCACAGAGGAGCAAGCCCGAAAGCCTTCGACAGGGC
 CACGAAGCTGGAGCAGGAGTTCACGGAGTGCTTCTCAGCCATCGTAGAGGGCGACAGCTTTGAAGAGATC
 TATCACAAAGTGAACGTGTCATCGAAGACCTCTCAGGCCCTACATCTGGGTCCAGCCCGAGAGAGAC
 TC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG227405 representing NM_007864
Red=Cloning site Green=Tags(s)

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MDCLCIVTTKKYRYQDEDTPPLEHSPAHLPNQANSPPVI VNTDTLEAPGYELQVNGTEGEMEYEEITLER
GNSGLGFSIAGGTDNPHIGDDPSIFITKIIPGGAAAQDGR LRVNDSILFVNEVDVREVTSHA AVEALKEA
GSIVRLYVMRRKPPAEKIIIEIKLIKGPKGLGFSIAGGVGNQHIPGDN SIYVTKIEGGA AHKDGRLQIGD
KILAVNSVGL E DVMHEDAVAALKN TYDVVYLKVAKPSNAYLSDSYAPPDITTSYSQHL DNEISHSSYLGT
DYPTAMTPTSPRRYSPVAKDLLGEEDIPREPRRIVIH RGSTGLGFNIVGGEDGEGIFISFILAGGPADLS
GELRKGDQILSVNGVDLRNASHEQAAIALKNAGQTVTIIAQYKPEEYSRFEAKI HDLREQLMNSSLSGSGT
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KRRVERREWSRLKAKDWGSSSGSQGREDSVLSYETVTQMEVHYARPIIILGPTKDRANDLLSEFPDKFG
SCVPHTTRPKREYEIDGRDYHFVSSREKMEKDIQAHKFEAGQYN SHLYGTSVQSVREVAEQGKHCILDV
SANAVRRLQA AHLHPIAIFIRPRSL ENVLEINKRIT EEQARKAFDRATKLEQEFTECFSAIVEGDSFEEI
YHKVKRVI EDLSGPYI WVPARERL
    
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_007864

ORF Size: 2172 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_007864.3](#), [NP_031890.1](#)

RefSeq Size: 3339 bp

RefSeq ORF: 2175 bp

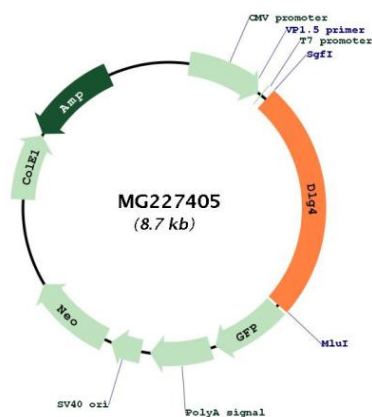
Locus ID: 13385

UniProt ID: [Q62108](#)

Cytogenetics: 11 B3

Gene Summary: Interacts with the cytoplasmic tail of NMDA receptor subunits and shaker-type potassium channels. Required for synaptic plasticity associated with NMDA receptor signaling. Overexpression or depletion of DLG4 changes the ratio of excitatory to inhibitory synapses in hippocampal neurons. May reduce the amplitude of ASIC3 acid-evoked currents by retaining the channel intracellularly. May regulate the intracellular trafficking of ADR1B. Also regulates AMPA-type glutamate receptor (AMPA) immobilization at postsynaptic density keeping the channels in an activated state in the presence of glutamate and preventing synaptic depression (Probable).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG227405