

Product datasheet for **MR230137**

Dlg2 (NM_001243046) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dlg2 (NM_001243046) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dlg2
Synonyms:	A330103J02Rik; B230218P12Rik; B330007M19Rik; Dlg2; Gm1197; Gm21505; PSD93
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR230137 representing NM_001243046
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTCTTCGCAGAGATGGGAGTTAAAAGGCTGGCTACCATGGGAGCCCCGAAGGTAGTCCCTCACAAAG
 GCTCCACTGGCCTGGGCTTCAACATTGTGGCGGGGAAGATGGAGAAGGTATTTTGTATCCTTCATTCT
 GGCCGGTGGACCAGCAGACCTGAGTGGGAGCTCCAGAGAGGAGACCAGATCTTGTGCGTGAATGGAATC
 GATCTTCGAGGAGCATCCCATGAGCAGGAGCTGCAGCACTGAAGGGGGCTGGACAGACTGTGACAAATCA
 TAGCACAATATCAACCTGAAGATTACGCTCGATTTGAGGCCAAAAATCCATGACCTACGAGAGCAGATGAT
 GAACCACAGCATGAGCTCCGGTCCGGTCCCTTCGAACCAATCAGAAACGCTCCCTGTATGTCAGAGCC
 ATGTTTGACTATGACAAGAGCAAGGACAGTGGGCTGCCAGCCAAGGACTTAGTTTTAAATGGAGACA
 TCCTTCATGTCATCAATGCCTCTGATGATGAGTGGTGGCAAGCCAGAAGGTCACACTAGATGGGGACAG
 CGAGGAGATGGGGCTATTCCCAGCAAGCGGAGGTTGAAAGAAAGGAGCGTGCCCGATTGAAGACAGTG
 AAGTTCAATGCAAAACCTGGTGTGATTGATTCCAAAGGTCATTCAATGACAAGCGTAAAAAGAGCTTCA
 TCTTTTACGAAAATCCCATTCTACAAGAACAAAGGAGCAGAGTGAAGCAGGAAACAGTGTCTCTGAACA
 ACACGCTCTTCTAATGCCAGCGATAGCGAAAAGTACTGCGGAGGACAAGAAGATCTCATTCTTTCTAT
 GAACCTGTCACGAGGCAGGAAATAAACTACACGCGGCCAGTGATTATCCTGGGCCCATGAAGGATCGAA
 TCAATGATGACTTGATATCTGAATTTCTGATAAATTTGGCTCCTGTGTGCCTCATACTACGAGGCCAAA
 GCGTGACTACGAAGTCGACGGCAGAGACTATCACTTTGTCATTTCTAGAGAACAATGGAGAAAGATATC
 CAAGAGCACAAAATTTATAGAAGCTGGCCAGTACAATGACAATTTATACGGAACCAAGTGTGCAATCTGTGA
 GATTTGTAGCAGAAAGGGGCAAGCACTGTATACTTGATGTATCAGGAAATGCTATTAAGCGGTTACAAGT
 CGCCAGCTCTATCCATTGCCATCTTCAAAAGCCCAAGTCTCTGGAACCTCTGATGGAGATGAATAAG
 CGTCTGACAGAGGAACAAGCCAAGAAAACCTTATGACCGGGCGATTAACTAGAACAAGAATTTGGAGAAT
 ATTTTACAGCTATTGTCCAAGGAGATACCTTAGAAGATATTTACAACCAATGCAAGCTTGTATTGAAGA
 GCAGTCTGGACCTTTCATCTGGATTCCCTCAAAGGAGAAGTTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR230137 representing NM_001243046
 Red=Cloning site Green=Tags(s)

MSSQRWELKGWLPWEPRKVVLHKGSTGLGFNIVGGEDGEIGFVSFILAGGPADLSGELQRGDQILSVNGI
 DLRGASHEQAAAAALKGAGQVTIIAQYQPEDYARFEAKIHDLREQMMNHSMSGSGSLRTNQKRSLYVRA
 MFDYDKSKDSGLPSQGLSFKYGDILHVINASDDEWWQARRVTLGDSEEMGVIPSKRRVERKERARKTV
 KFNAKPGVIDSKGSFNDKRKKSIFSRKFPFYKNKEQSEQETS DPEQHVSSNASDSESSCRGQEDLILSY
 EPVTRQEIN YTRPVII LGPMKDRINDDL ISEFPDKFGSCVPHTTRPKRDYEV DGRDYHFV I SREQMEKDI
 QEHKFIEAGQYNDNL YGTSVQSVRFVAER GKHCILDVSGNAIKRLQVAQLYPIAIFIKPKSLEPLMEMNK
 RLTEEQAKKTYDRAIKLEQEFGEYFTAI VQGD TLEDIYNQCKLVIEEQSGPFIWIPSKEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

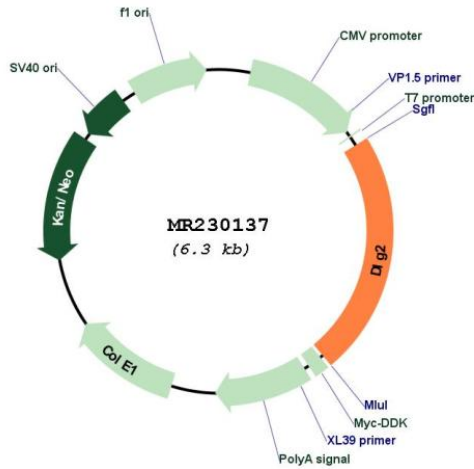
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:

NM_001243046

ORF Size:

1443 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_001243046.1](#), [NP_001229975.1](#)

RefSeq Size: 6250 bp

RefSeq ORF: 1446 bp

Locus ID: 23859

Cytogenetics: 7 51.07 cM

MW: 55.2 kDa

Gene Summary: Required for perception of chronic pain through NMDA receptor signaling. Regulates surface expression of NMDA receptors in dorsal horn neurons of the spinal cord. Interacts with the cytoplasmic tail of NMDA receptor subunits as well as inward rectifying potassium channels. Involved in regulation of synaptic stability at cholinergic synapses. Part of the postsynaptic protein scaffold of excitatory synapses.[UniProtKB/Swiss-Prot Function]