

## Product datasheet for MR214010

### Dlg5 (NM\_001163513) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Dlg5 (NM\_001163513) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Dlg5  
**Synonyms:** 4933429D20Rik; mKIAA0583; T25557  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR214010 representing NM\_001163513  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGAGCCGACGCGCGGGAGCTGCTCGCCAGTGTCTCAGCAGAGCCTGGCCAGGCCATGACCGAGGTGG  
 AGGCCGTGCTGGGCTGCTGGAGGCAGCAGGAGCGCTGAGCCCCGGGAGCGGCCGAGCTGGACGAGGA  
 GGCGGGAGGCCAAGGCGGAGCTGCTGCTCCAGCTCCTCTGGCCAAGGAGCAGGACCCTCCAGGAC  
 CTGCGCGCCGCCCTGGAGAAGACTCAGCCTCACCTGCTGCCTATTCTCTACCTGAACGGCGTCGTCGGGC  
 CGCCGAGTCTACAGAGGGCGCGGGGTCCACCTACAGCGTCTGTCCATCATGCCCTCAGACTCGGAGAG  
 CAGCAGCTCCCTCAGCAGTGTGGGGACTACTGGGAAGGCACCGTCCCCACCACCCCTCCTCACCGAGCAG  
 CAGGCCAATGACACGGTGGAGAACCTCTCCATTCAACTAAGGCTGATGACCCGTGAGAGGAATGAGCTAC  
 GCAAGCGCCTGGCCTTCGCCACCCATGGAGCCACCTTTGACAAAAGGCCCTACCACAGGCTGAATCCTGA  
 TTATGAGAGGCTAAAGATCCAGTGTGTGCGGGCCATGTCGGACCTGCAGAGCTTACAGAACCAGCACACC  
 AACGCCTGAAGAGGTGCGAGGAGGTGGCCAAGGAGACAGACTTCTATCACCCCTCCACAGCCGGCTCC  
 TGAGTGACCAGACGCAGCTGAAGGACGATGTGGACATGCTGAGACGGGAGAACGGGAAGCTGCGGAGGGA  
 GCGCAATCTGCTGCAGCAGTCTGGGAGGACATGAAGCGGCTCCGGGAAGAGGACCAGAAGGAGATAGGT  
 GACCTCCGGGCCAGCAGCAGAGGTGCTGAAGCACAATGGCTCATCAGAGATCCTCAACAAGCTGTACG  
 ACACGGCCATGGACAAGCTGGAGGTAGTCAAGAAGGACTACGATGCCCTGCGGAAGAGATACAGCGAGAA  
 GTTTGCCATGCACAACCTCGGACCTGAGCCGCTGGAGCAGCTGGGGGAGGAGAACCAGCGTCTGCAGAAG  
 CAGACGGAGATGCTGACCCAGCAGAGGGACACGGCCATCCAGTTACAGCACCAAGTGCAGCTCTCCCTGA  
 GGAGGTTTGAGACGATCCACCATGAGCTGAGCAAGGCCACAGCCCAGAACAAGGACCTGCAGTGGGAGAT  
 GGAGCTGCTGCAATCCGAGCTCACGGAGCTGAGGAGCAAGCAGGTGAAAACCGCCAAGGAGTCAGAGAAA  
 TACAAGGAGGAGCGGATGCTGTGTACAGCGAGTACAAGTCTCATGAGCGAACCGCACCAGGTATCT  
 CCGAGCTGGACAAGCTACAGACAGAGGTAGAGCTGGCCGAGTCCAAGCTCAAAGCAGCACATCCGAGAA  
 GAAGGCAGCCAGCGAGGAGATGGAGGCCCTGCGCAGATCAAAGACACAGTGACCATGGATGCTGGGAGA



[View online »](#)

GCCAACAAAGAGGTGAAATCCTCCGAAAAACAGTGAAGGCCTTGTGCCAGGAGCTGAAGGAAGCCCTCC  
 AGGAAGCAGACGTGGCCAAGTGCCGGCGGGACTGGGCCTTTCAGGAGCGGGACAAGATTGTGGCAGAGCG  
 TGACAGCATCAGGACCCTGTGTGACAACCTGAGGCGGGAGCGAGATCGAGCTGTGAGTGAGCTGGCTGAA  
 GCCCTTCGCAGCCTGGATGACTCGGAAGCAGAAGAATGACGTGAGCCGGGAGCTCAAGGAGCTCAAGG  
 AGCAGATGGAATGTCAGCTGGAGAAGGAGGCCGATTCCGGCAGCTGATGGCCACAGTTCGCACGACTC  
 AGCCATCGACACGGATTCCATGGAGTGGAGACAGAAGTTGTGGAATTTGAGAGAGACGGAGGATATT  
 GACTTGAAAGCATTGGTTTGACATGGCAGAAGGCGTGAATGAGCCTTGTTCACAGGGGATTGCGGCA  
 TATTTGTTACTAAAGTGGATAAAGGAAGCATTGCTGATGGTCGCTTAAGGGTCAACGACTGGCTGCTGAG  
 AATCAACGATGTAGACCTCATCAACAAGGACAAGAAACAGGCCATCAAGGCACTCCTCAACGGAGAGGGA  
 GCCATCAACATGGTTGTGAGGCGGAGGAAGTCCCTGGGTGGGAAGGTCGTACACCTCTGCACATCAACC  
 TCAGTGGACAGAAAGACAGTGGCATCAGTTGGAGAATGGAGTGTATGCTGCCGAGTGGTGCCTGGAAG  
 CCCGGCTGCCAAAGAGGGGTCCCTCGCCGTGGGAGACAGGATTGTTGCGATCAACGGTATTGCACTGGAC  
 AATAAGTCTCTAAATGAATGTGAATCTCTGCTGCGCAGCTGTCAAGACTCCTTGACCCTCTCCCTCTGA  
 AGGTGTTTCCCCAGAGCTCCTCATGGAGTGGCCAGAACATCTTTGAAAATATCAAGGACTCAGATAGGAT  
 GCTGAGTTGCCGAGCCCACGGCCAGAGGTCCAGGCGCATAACAAACGGAACTTGTACAGCACAATAAT  
 TCACGACAGACAGACATTTTCTACACGGATCGGCTGGAGGACAGGAAGGAGCTGGGACATTCTGGAGGCA  
 GCAGTTCTTTTCCACAAGCCCTTCTCTGGATCCTCGTCTCCAGTCTCCCTCAGGCTGTCTAGCAC  
 CTCTGAGCGTAGTCTGAACTCATTCCGCTCTGATACCTCTGCAGAACGTGGCTATGGGCTGGTGGATATG  
 CGGAGCCAGCGGCCACTGCTGTCTTTGAGACTGAGGTGGGCCCTGTGGGGCAGTAGAGGTTCCCTTG  
 ACAAGATAGATCCAGAGGGCTCCAATAGTGGTGGGACCTGGCCAAAGGCTGTGCTGGCTCCACATCAGG  
 GCCTGAGAACTCTGTGATAAGAAACCCAAACAAAGGAAGTCCATCTTTGACCCAAACTTTCAAG  
 CGCCACAGACACCCCCAAAATAGACTACCTGCTTCCAGGCCCTGGGCTTACTCATTCCCCCAGCCCT  
 CCAAGGGTAGGATCTCTGACACCCCAAGCCCAAGGAGAAGTACTCTATCAAGTCCAACACAG  
 GCTGGAGACCAGTTCTGAGTCAAGCCACTTTGGTGGGACGCTACCTTCCACCAGCCCTCCAGTGGCC  
 CCACCCCCAGCATGGATCCCAGTGAGCCACGCATGCTTACCTCCTCGGAAGGCCAGGTCGCGATTG  
 CCTCCAGTACCCTCTGAAGGGGACGGAGACCTCCTACCTGCCCGCAAGAAGCCTTGTGATGAAGA  
 CCTCACCTCCCAGAAAGTCGATGAGCTGGGGCAGAAACGGCGCCGCAAGTCTGCCCAAGTTTTCGG  
 CCCAAGATCTCTCAGTGGTATCCCTGCTCAGTGCCTGGAGGAACAGGAGTGTGTTCCAGCCATCGGAG  
 AGCTCTCCCCAGAGGGTCAGGAATGGTCCCGTACTACCAGGGCATGCTAGCCGGCATGGCAACCCCT  
 ACTCTACCCCAACCGCCATCTGTGGCACCGTTCGCCGAGTATGACCCCGGCACCCTGTGGGCTCC  
 ATTCTGAGGAACCCATTTATACTGTGCGCAGCCACAGGGTGTTCCTGCGGCTCACCACCGTGCCCC  
 GTGATGCTGGCTCCCAGAGCTTGTCTCCAGTGTCCAGCATCAGGGACGCTCAGCTGGACCTGAGCCA  
 CAGGGCTGCAGTGACTACTCTGAGATGAGAGCCTCCCAGGGTCCAACCTCTGCCCTCAGTGCCCGC  
 CTTGGCTCTTCCAGTAACCTGCAGTTCAAGGCTGAGCGGATTAAGATCCCCTAACACCAAGATATCCCC  
 GGTCTGTGATGGGCTCTGACAGAGGCTCACTGTACATTTGAATGTAGCACTCTCCCCGGTCCCCGCT  
 GAATATCGACACCCTGTCTCTGTAGCCAGCCTCAGACCACAGCCTCCACTTTACCCAGGATTGCGGTC  
 AACCCCTCTTCCATGGGAGCGGAGGAAGGACAGGCCTTTTGTGAAGAGCCACGCCACGTGAAGGTGC  
 AGAAGGGTTCAGAGCCTCTGGTATCTCCATCGTGAAGTGGAGAAAAGGGTGGTGTCTATGTCTCAAGGT  
 GACCTGGGGAGCATCGCTCATCAAGCTGGACTGAGTATGGGGACCAGTTACTTGAGTCAATGGCATA  
 AACCTGAGAAGTGCCACCAGCAGCAGGCCCGGCTCATCATCGGACAGCAGTGTGACACCATCACCATCC  
 TGGCCAGTACAACCCACACATCCACCAGCTCAACAGCCACTCCCCTCAGCTCTCATCTGGACCCAGC  
 TGCTACCCCTCACTCTACTCTCCAGGACAGTGTGGGACCCAGAACATCCCTCTGTGATCGACCCA  
 CTGATGGAACAGGATGAAGTCTTGGCACCCCCCAGCCAAGCAAGCGCCTCCAGCACCAGGAGTGTGG  
 GAGATACCACCAAGAAGACCCCTGATCCCCGATTGTTTTCATCAAGAAATCCCAGCTGGATCTGGGGT  
 GCATTTGTGGTGGAACTGCACGGAGTGTGTTGGCCGAAGTGAAGATGACAGTCTGCCAAGGGT  
 CCTGATGGCTCGTCCCAGGAGACCTCATCTTGAATGAGTATGGCAGCCTGGATATGCGCAGCAGGACAGTGG  
 AGGACGTCTATGTGGAGATGCTGAAGCCTAAGGATAGCCTTCGCCTGAAGGTGCAGTACCCCATGAGGA  
 GTTCACCAGGGTCAAGGGCTGCCCGGAGACAGCTTCTACATCAGGGCCCTATATGACCGTCTGGCAGAG  
 GTGGAGCCTGAAGTGAAGTTTAAGAAAGATGACATCCTGTACGTGGATGATACGTTGCCCAAGGGGTGT  
 TTGGTCTTGGATGGCTGGCAGCTGGATGAGAATGCCAGAAAGATCCAGCGTGGGAGGATCCCAGCAA  
 ATACGTGATGGACCAAGGATTTCTCCCGAGGCTCAGCATGTCTGAGGTCAAAGATGACAACACAGCCAAG  
 ACGCTGTCAGCAGCTGCGCGCCGTTCTTCTTCCGAAGGAAACATAAACATAACGCAGTGGGTCCAAG

ACGGCAAGGACCTGCTCGCCCTGGACACCTTTTCCAACGACTCCATTCTCTCTTTGAAGACTCAGTGAG  
 CCTGGCCTATCAGCGGGTCCAGAAAGTGGACTGTACCTCTCTTCGGCCTGTTCTCCTCTGGGACCTTTA  
 CTGGATGTGGTGAAGAGATGCTGGTGAATGAGGCACCTGGCAAGTTCTGCAGATGCCCACTTGAGGTGA  
 TGAAGGCTTCCCAGCAAGCCATTGAGCGGGGTGTCAAAGACTGCCTGTTTGTGGACTACAAGCGGAGGAG  
 TGGCCATTTTGTGTTACTACTGTGGCTTCAATAAAGGAGATCACAGAAAAGAACCGGCACTGTCTTCTG  
 GACATCGCCCCGCATGCCATCGAGAGGCTGCACCACATGCACATCTACCCATTGTATCTTCATCCGCT  
 ACAAGAGCGCAAGCACATCAAGGAACAGAGAGACCCTGTCTACCTGAGGGACAAGGTGACACAGAGGCA  
 TTCCAAAAGAGCAATTCGAAACAGCACAGAAGATCGATCAGGAGTACAGCAGGTACTTCACAGGGTTGTC  
 CAGGGTGGAGCCCTGTCCAGCATTTCAGCTCAGATCCTGGCCATGGTCAGTCAAGAACAAAGTAAAGTCC  
 TGTGGATCCCCGCTTGCCACCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR214010 representing NM\_001163513  
 Red=Cloning site Green=Tags(s)

MEPQRRELLAQCQQLAQMTEVEAVLGLLEAAGALSPGERRQLDEEAGGAKAELLLQLLLAKEQDFHQD  
 LRAALEKTQPHLLPILYLNGVVGPPQSTEGAGSTYSVLSIMPDSSESSSLSSVGTGKAPSPPLLETEQ  
 QANDTVENLSIQLRLMTRERNELRKRLAFATHGATFDKRPYHRLNPDYERLKIQCVRAMSDLQSLQNHQHT  
 NALKRCEEVAKETDFYHTLHSRLLSDQTQLKDDVDMLRRENGKLRRENRLLQQSWEDMKRLREEDQKEIG  
 DLRAQQQVQLKHNGSSEILNKL YDTAMDKLEVVKKDYDALRKRYSEKVAMHNSDL SRLEQLGEENQRLQK  
 QTEMLTQQRDTAIQLQHQCALSRRFETIHHEL SKATAQNKDLQWEMELLQSEL TELRSKQVKTAKESEK  
 YKEERDAVYSEYKLIMSERDQVI SELDKLQTEVELAESLKSSTSEKKAASEEMEALRQIKDVTMTDAGR  
 ANKEVEILRKQCKALCQELKEALQEADVAKCRRDWFQERDKIVAERDSIRTLCDNLRREDRRAVSELAE  
 ALRSLDDTRKQKNDVSRELKELKEQMECQLEKEARFRQLMAHSSHDSAIDTDSMEWETEVEFERETEDI  
 DLKALGFDMAEGVNEPCFPGDCGIFVTKVDKGS IADGRLRVNDWLLRINDVDL INKDKKQAIKALLNGEG  
 AINMVRRRKSLGGKVVTPHINLSGQKDSGISLENGVYAAAVVPGSPAAGEGLAVGDRIVAINGIALD  
 NKSLNECESLLRSCQDSLTL SLLKVFPPQSSWSGQNI FENIKSDRMLSCRAHGPEVQAHNKRNLQHNH  
 STQTDIFYTDRLEDRKELGHSGGSSFLHKPFSGSSSPVSPQACPSTSERLSNFRSDTSAERGYGLVDM  
 RSQRPLLSFETEVP CGAVEVPLDKIDPEGSNSGGTWPKAVL GSTSGPEKLSVYKPKQRKSI FDPNTFK  
 RPQTTPPKIDYLLPGPGLTHSPQPSKRVGSLTPPKPPRRSDSIKFQHRLETSSSESEATLVGSSPSTSPPSA  
 PPPSMDPSEPTHASPPRKARVRIASSYHSEGDGDTSYLPAKKPCDEDLTSQKVDELGQKRRRPKSAPFR  
 PKISPVVIPAQCLEEQECVPAIGELSPGQEWSPYSPGHASRHGNPLLYPNRPSVGTVPMSMTPGTTVGS  
 ILRNPIYTVRSHRVLPCGSPVPRDAGSQSLSPSVQHQRSLDLSHRACSDYSEMRASQGSNSLPSSAR  
 LGSSSNLQFKAERIKIPLTPRYPRVMGSDRGSLSHSECSTPPRSPLNIDTLSSCSQPQTASTLPRIAV  
 NPSSHGERRKDRPFVEEPRHVQKQKSEPLGISIVSGEKGGVYVSKVTLGSIHQAGLEYGDQLLEFNIGI  
 NLRSAEQQARLIIGQQCDTITILAQYNPHIHQLNSHSRSSHLDPAATPHSTLQSSAGTPEHPSVIDP  
 LMEQDEGPGTTPPAKQSASSTRSVGDTTKTPDPRIVFIKKSQDLGVHLCGGNLHG VFVAEVEDDSPAKG  
 PDGLVPGDLILEYGLDMRSRTVEDVYVEMLKPKDSLRLKVQYRHEEFTRVKGLPGDSFYIRALYDRLAE  
 VEPELSFKKDDILYVDDTL PQGVFGSWMWQLDENAQKIQRGQIPSKYVMDQEF SRRLSMSEVKDDNTAK  
 TLSAAARRSFFRRKHKHKRSGSKDGKDLLALDTF SNDSIPLFEDSVSLAYQRVQKVDCTSLRPVLLLGPL  
 LDVVKEMLVNEAPGKFCRCPLEVMKASQQA IERGVKDCLFVDYKRRSGHFDVTTVASIKEITEKNRHCLL  
 DIAPHAIERLHMHIIYIVIFIRYKSAKHIKEQRDPVYL RDKVTQRHSKEQFETAQKIDQEYSRYFTGVV  
 QGGALSSICTQILAMVSQE QSKVLWIPACPP

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9037\\_e03.zip](https://cdn.origene.com/chromatograms/mm9037_e03.zip)

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**ACCN:** NM\_001163513

**ORF Size:** 5763 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\\_001163513.1](#), [NP\\_001156985.1](#)

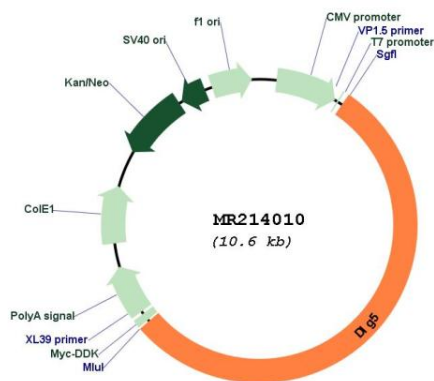
**RefSeq Size:** 7878 bp

**RefSeq ORF:** 5766 bp

**Locus ID:** 71228  
**UniProt ID:** [E9Q9R9](#)  
**Cytogenetics:** 14 A3  
**MW:** 214.8 kDa

**Gene Summary:** Acts as a regulator of the Hippo signaling pathway. Negatively regulates the Hippo signaling pathway by mediating the interaction of MARK3 with STK3/4, bringing them together to promote MARK3-dependent hyperphosphorylation and inactivation of STK3 kinase activity toward LATS1 (PubMed:28087714). Positively regulates the Hippo signaling by mediating the interaction of SCRIB with STK4/MST1 and LATS1 which is important for the activation of the Hippo signaling pathway. Involved in regulating cell proliferation, maintenance of epithelial polarity, epithelial-mesenchymal transition (EMT), cell migration and invasion (By similarity). Plays an important role in dendritic spine formation and synaptogenesis in cortical neurons; regulates synaptogenesis by enhancing the cell surface localization of N-cadherin (PubMed:25232112). Acts as a positive regulator of hedgehog (Hh) signaling pathway. Plays a critical role in the early point of the SMO activity cycle by interacting with SMO at the ciliary base to induce the accumulation of KIF7 and GLI2 at the ciliary tip for GLI2 activation (PubMed:25644602).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR214010