

Product datasheet for **MC225020**

Dlg5 (NM_027726) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Dlg5 (NM_027726) Mouse Untagged Clone
Tag: Tag Free
Symbol: Dlg5
Synonyms: 4933429D20Rik; mKIAA0583; T25557
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Fully Sequenced ORF: >MC225020 representing NM_027726
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCCGACGCGCGGGAGCTGCTCGCCAGTGTCTCAGCAGAGCCTGGCCAGGCCATGACCGAGGTGG
AGGCCGTGCTGGGCTGCTGGAGGCAGCAGGAGCGCTGAGCCCCGGCGAGCGGCCAGCTGGACGAGGA
GGCGGGAGGCGCAAGGCGGAGCTGCTGCTCCAGCTCCTCTGGCCAAGGAGCAGGACCCTCCAGGAC
CTGCGCGCGCCCTGGAGAAGACTCAGCCTCACCTGCTGCCTATTCTCTACCTGAACGGCGTCGTCGGG
CGCCGAGTCTACAGAGGGCGCGGGACTACTGGGAAGGCACCGTCCCCACCACCCTCCTCACCGAGCA
GCAGGCCAATGACACGGTGGAGAACCTCTCCATTCAACTAAGGCTGATGACCCGTGAGAGGAATGAGCTA
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CTGAGTGACCAGACGCAGCTGAAGGACGATGTGGACATGCTGAGACGGGAGAACGGGAAGCTGCGGAGGG
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GACACGGCCATGGACAAGCTGGAGGTAGTCAAGAAGGACTACGATGCCCTGCGGAAGAGATACAGCGGAA
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AGCCAACAAGAGGTGAAATCCTCCGAAAACAGTGTAAGGCCTGTGCCAGGAGCTGAAGGAAGCCCTC



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CAGGAAGCAGACGTGGCCAAGTGCCGGCGGGACTGGGCCTTTCAGGAGCGGGACAAGATTGTGGCAGAGC
 GTGACAGCATCAGGACCTGTGTGACAACCTGAGGCGGGAGCGAGATCGAGCTGTGAGTGAGCTGGCTGA
 AGCCCTTCGCAGCCTGGATGACTCGGAAGCAGAAGAATGACGTGAGCCGGGAGCTCAAGGAGCTCAAG
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 CTCAGTGGACAGAAAGACAGTGGCATCAGTTTGGAGAATGGAGTGTATGCTGCCGAGTGGTGCCTGGAA
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 TACTCTACCCCAACCGGCCATCTGTGGCACCGTTCCCGGAGTATGACCCCGGCACCACTGTGGGCTC
 CATTCTGAGGAACCCATTTATACTGTGCGCAGCCACAGGGTGTCCCTGCGGCTCACCACCCGTGCC
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 ACAGGGCCTGCAGTACTCTGAGATGAGAGCCTCCAGGGTTCCAACCTCTGCCCCTCAGTGCCTCG
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 CGGTCTGTGATGGGCTCTGACAGAGGCTCACTGTACATTTCTGAATGTAGCACTCCTCCCGGTCCCGGC
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 CAACCCCTCTTCCATGGGGAGCGGAGGAAGGACAGGCCTTTTGTGGAAGAGCCACGCCAGTGAAGGTG
 CAGAAGGGTTCAGAGCCTCTGGGTATCTCCATCGTGAGTGGAGAAAAGGGTGGTGTCTATGTCTCAAGG
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 CTGGCCAGTACAACCCACACATCCACCAGCTCAACAGCCACTCCGCTCCAGTCTCATCTGGACCCAG
 CTGCTACCCCTCACTCTACTCTCCAGGGCAGCAGTGTGGGACCCAGAACATCCCTCTGTGATCGACCC
 ACTGATGGAACAGGATGAAGTCTGACACCCCCAGCCAAGCAAAGCGCTCCAGCACCAGGAGTGTG
 GGAGATACCACCAAGAAGACCCCTGATCCCGCATTGTTTTCAAGAATAACCCAGTGGATCTGGGGG
 TGCCTTGTGTTGGTGGGAACCTGCACGGAGTGTGTTGGCCGAAGTGAAGATGACAGTCTGCCAAGGG
 TCCTGATGGCCTCGTCCAGGAGACCTCATCTTGAATGAGTATGGCAGCCTGGATATGCGCAGCAGGACAGT
 GAGGACGTCTATGTGGAGATGCTGAAGCCTAAGGATAGCCTTCGCTGAAGGTGCAGTACCGCCATGAGG
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 GACGCTGTGAGCAGTGCAGCGCGGTTCTTCTTCCGAAGGAAACATAAACATAAACCGAGTGGGTCCAAA
 GACGGCAAGGACCTGCTCGCCCTGGACACCTTTTCCAACGACTCCATTCTCTTTGAAGACTCAGTGA

GCCTGGCCTATCAGCGGGTCCAGAAAGTGGACTGTACCTCTCTTCGGCCTGTTCTCCTCCTGGGACCTTT
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ATGAAGGCTTCCCAGCAAGCCATTGAGCGGGGTGTCAAAGACTGCCTGTTTGTGGACTACAAGCGGAGGA
GTGGCCATTTTGATGTTACTACTGTGGCTTCAATAAAGGAGATCACAGAAAAGAACCGGCACTGTCTTCT
GGACATCGCCCCGCATGCCATCGAGAGGCTGCACCACATGCACATCTACCCATTGTCATCTTCATCCGC
TACAAGAGCGCCAAGCACATCAAGGAACAGAGAGACCCCTGTCTACCTGAGGGACAAGGTGACACAGAGGC
ATTCCAAAGAGCAATTGAAACAGCACAGAAGATCGATCAGGAGTACAGCAGGTACTTCACAGGGTTGT
CCAGGGTGGAGCCCTGTCCAGCATTGCACTCAGATCCTGGCCATGGTCAGTCAAGAACAAGTAAAGTC
CTGTGGATCCCCGCTTGCCACCCTAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-MluI
ACCN:	NM_027726
Insert Size:	5697 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<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:	<u>NM_027726.1</u> , <u>NP_082002.1</u>
RefSeq Size:	7809 bp
RefSeq ORF:	5697 bp
Locus ID:	71228
UniProt ID:	<u>E9Q9R9</u>
Cytogenetics:	14 A3

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]

Transcript Variant: This variant (2) lacks an alternate in-frame exon in the 5' coding region, compared to variant 1. The resulting protein (isoform 2) is shorter than isoform 1.