

## Product datasheet for MR222229

### Disp2 (NM\_170593) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Disp2 (NM\_170593) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Disp2  
**Synonyms:** AI840597; B230210L08Rik; Di; DispB; mKIAA1742  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR222229 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCTCCCGAGGCAAGCCAGAGAGAAGCTGCTCCCTCCACACATGTCCCCTGAAGACCCAACCGGTG  
 CTCCGGTACCACCACCAACCGTGTCCACGCTCCAGGCTATAGACCCGACGAGTCCGTTAACGGCTGGTCA  
 TTTTGCCTTTCCTCGAGCGCCTCAAGACTATCAAGAAGGAAGTTCGTTATTAGGATTAGGAGACCAAGCA  
 TCTCTATGTGCCATGTCTCAACCTCAGCACCTCCATAGACACCTCTCAGCATGATGGGTCTGGAAGC  
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 GCTGGGCTGTTGGGAAGCCACCCTTACTTTCTGAGCCTTTACTGGTTTTGAAGCCTCGAGACACAG  
 AGATAGGCCGAAGGTTAGAAGTTTGAAGGCCATGCAGGCCCTCACTGGCCCAAGAATCTGCTTTCTCT  
 TTCCCCAGACCCTGAGATGAACAGCTCAAGCCTCCTCAGCACCTGAGCCTGCAGCCTGGGGCAGGGCC  
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 GCAAGCCATCCATTCCATGTGTGCGATAGAAGAGGAGCAGATCCGCTCTCACATCAGTTTTGGGGCTCTG  
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 TACACATCTATCAGTGGCATGGACTTGGGCTCAAGCCAGACTGCTGAAGTATTACCTAGCCGAAGACA  
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CGCATGGCCTACTTCCCCTTTGTCAATCTAGCGGCTCTCCTTCTGCTTAGTGGCGTCTGTGTCAATTACA  
CGCTCATCTTCTTGGATATGTGGCGCCTCAGCAGGGGTCAAGTGCCTTCTGGGGGCATGCCACACCGTGT  
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TCTGGCTAGCACTGAAGGAGACCATCTATGACCCAAACATGCCAATTCTCACCACAGCAGCTTATCCTG  
GAAGGGCCGTGGAGGGCCAGGCGATATCAGCCCTGTGATGCTTCCCAACAGTCAGCCAGATCTCCAGAC  
GTTTGGCTCCGTAGGCCAGCACCTACCTCTGGCTACAGCAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR222229 protein sequence  
 Red=Cloning site Green=Tags(s)

MAPEASPERSCSLHTCPLEDPTGAPVPPPTVSTLQAIDPTSPLTAGHFAFPAPQDYQEGSSLLGLGDQA  
 SLCAHVSNLSTSIDTSQHDGVWKQPSVQRHVSVRQERTFRMPKSYSHMIADWPVAVIVGCLAFIFLCTL  
 AGLLGSPLDFSEPLLGFEPRDTEIGRRLEVWKAMQALGPKNLLSLSPDPEMNSSLLSTLSPAAGRA  
 EESVVRTKRMVGPVEVKEEENFFCGRPEKSHAKLVFVSTSGGSLWNLQAIHSMCRIEQEQRSHISFGAL  
 CQRSAANECCPSWSLGNYLAVLSNRSSQDTTQADTDLALLRFCATFYHRGVLVPACVGSQDKPPFC  
 AQVPAKCTGSNVVYEFLLHYLLDRDFLSPQTADYQVPSLKFALLFLPIIKTSSLLDIYLDGLGDIKVDN  
 YTSISGMDLGLKPRLLKYLAEDTMYPLIALVVIFFGMSLYLRSLFITFMSLLGVLGSLMVAYFLYHVA  
 RMAFYFPVNLAAALLL SGVCVNYTLIFLDMWRLSRGQVPSGGMPHRVGRMHHFGYLLVSLGTTSAFY  
 GSYL S RLP AVRCFALFMGTAVL VHMGL TLLWLPATVV LHERYL AHGCVAQAHQ RGGSDPLRLLALHRR  
 IRIFRKIISILSRLLFQRL LPCGVIKFRYI WICWFAALAAGGAYIGGVSPRLQLPILLPLGGQFFRSSHP  
 FERFDAEYRQQFLFEDLPPNEGGNLPVVLVWGILPVDTS DPLDPRNTSSVSDPDFSPSSPEAEWLLAL  
 CHGAQNQSF FGDQPEGWPTLCLVEALQQWME SPSCGRLGPDLCGQSEFPWAPQLYLHCLKMMALEQSPD  
 GTRDLGLRFDTHGNLAALV LKFQTNLPYSTEYGPVHHFYTEISRWLSTEMSKAPGLNQGWF TSNLELYS  
 LQHSLS TEPAVVLGLALALAFATLL LSTWNVPLS LFSVA AVAGTVLLTVGLLV LLEWQLNTAEALFLSAS  
 VGLSVDLTINYCISYHLCPHPDRLSRVAFSLRQISRATAMTTGVL FASGVIMLPSTILLYRKLGIIVMMV  
 KFLGCGFASFFQSLCCFFGPEKNCGQILWPCAHLPWDAGTEDPDEKGRAGPPGFSEHYELQPLARRRSP  
 SFDTSTATSKLSHRPSILSEDLQIHDGSCCLQHAQAPVSPRDL LLDHQTVFSQCPALQTS SPYKQAGTP  
 QTWIRQDSQGQKTEPLQALPEGPAHCPKPKVEELPDGLCSSASTLEGLSVSDDTCASEHSVRVPDSVGT  
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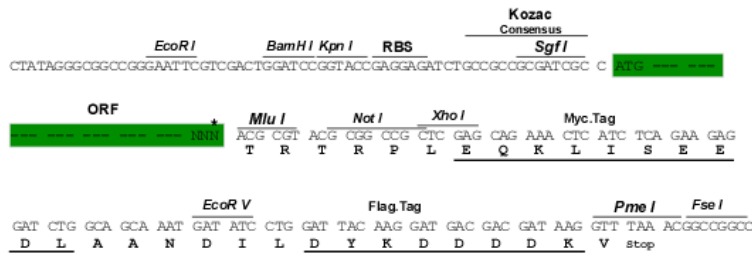
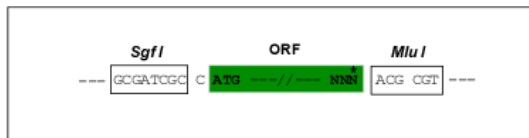
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

ACCN:

NM\_170593

ORF Size:

4038 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_170593.1](#), [NM\\_170593.2](#), [NM\\_170593.3](#), [NP\\_733481.1](#)

**RefSeq Size:** 6629 bp

**RefSeq ORF:** 4038 bp

**Locus ID:** 214240

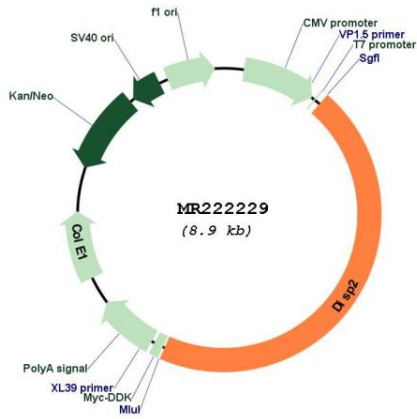
**UniProt ID:** [Q8CIP5](#)

**Cytogenetics:** 2 E5

**MW:** 148 kDa

**Gene Summary:** The pattern of cellular proliferation and differentiation that leads to normal development of embryonic structures often depends upon the localized production of secreted protein signals. Cells surrounding the source of a particular signal respond in a graded manner according to the effective concentration of the signal, and this response produces the pattern of cell types constituting the mature structure. A segment-polarity gene known as dispatched has been identified in Drosophila and its protein product is required for normal Hedgehog (Hh) signaling. [provided by RefSeq, Sep 2015]

Product images:



Circular map for MR222229