

## Product datasheet for **MR226069**

### **Fzd5 (NM\_022721) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Fzd5 (NM_022721) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Fzd5
Synonyms:	5330434N09Rik; AI427138; Fz-5; Fz5; mFz5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR226069 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCTCGACCCGACCCGCTGCGCCTCCCTCTCTTCTGTGCTGTTGCTGGCGCAGCTGGTGGGCCGGG  
 CAGCGGCCGCCTCCAAGGCCCGGTGTGCCAGGAAATCACGGTGCCCATGTGCCGAGGCATCGGCTACAA  
 CCTGACGCACATGCCCAACCAGTTCAACCATGACACGCAGGACGAAGCAGGCCTGGAGGTGCACCAATTC  
 TGGCCGCTTGTGGAGATCCACTGCTCACCGACCTGCGCTTCTTCTGTGCTCTATGTACACGCCCATCT  
 GTTTGCCGACTACCACAAGCCGCTACCACCGTCCGTTCCGTGTGCGAGCGGCCAAGGCCGGCTGCTC  
 GCCGCTCATGCGCCAGTACGGCTTCGCCTGGCCCGAGCGCATGAGCTGCGACCGCCTCCCTGTGCTGGGC  
 GGGCAGCCGAGGTTCTGTGATGGATTATAACCGAAGCGAAGCCACCACCGCTCCCCTAAGTCCTTCC  
 CGGCCAAACCTACTCCAGGACCACCAGGGCGCCATCTTCCGGGGGCGAGTGCCCTCGGGAGGCC  
 ATCCGTGTGCACGTGCCCGAGCCCTTCGTGCCATCCTGAAGGAGTCACACCCACTCTACAACAAGGTG  
 CGACCCGCCAAGTGCCCAACTGCGCGGTGCCCTGCTACCAGCCGTCCTCCAGCCCGGACGAGCGCACAT  
 TCGCCACCTTCTGGATTGGCCTGTGGTCTGTGCTGTGCTTTCATCTCCACGTCCACCACCGTTGCCACCT  
 CCTCATTGACATGGAACGATTCCGCTACCTGAGCGCCCCATCATCTTCTGTCTGCGTGTACCTGTGT  
 GTGCTACTGGGATTCTTGGTGGCCTGGTAGTGGGCCATGCCAGCGTCGTTGCAGCCGTGAGCAGACCC  
 ACATTCATATGAGACTACCGCCCTGCGCTGTGACGGTTGTCTTCTTCTTAGTCTATTTCTTTGGCAT  
 GGCCAGCTCCATCTGGTGGGTATCCTGTGCTCACCTGGTCTTGGCGGCTGGCATGAAGTGGGGCAAT  
 GAAGCCATCGCAGTTATGCACAGTACTCCACCTTGTGCTGCTCATCCCCAGTGCAAGTCCATTA  
 CGCGCTGGCACTGAGCTCGGTGGACGGGACCCAGTGGCTGGCATCTGCTATGTGGGACCAAAACCTA  
 GAACTCACTACGAGGCTTGTCTTGGGCCCACTGGTGTGTACCTGTTGGTGGGCACGCTCTTCTTCTG  
 GCAGGCTTCTGTGCTACTTCCGCATCCGAGCGTCATCAAGCAGGGTGGCACTAAGACGGACAAGCTAG  
 AGAAGCTCATGATCCGCATCGGCATCTTACCCTGCTCTACACGGTGCCAGCCAGCATCGTGGTGGCCTG  
 CTACCTGTATGAGCAGCACTACCGGAGAGCTGGGAGGCAGCCCTCACCTGCGCGTGTCCGGGACCCGAC  
 GCTGGCCAGCCACGCGCAAACCCGAGTACTGGTGTCTCATGCTCAAGTACTTTCATGTGCTGGTGGTGG  
 GCATCACGTCGGGAGTCTGGATCTGGTCCGGCAAGACTCTGGAGTCTTGGCGGGGTTACCAGCCGCTG  
 CTGCTGCAGCTCTCGCGGGGCCACAAGAGCGGTGGCGCTATGGCCGAGGAGACTATGCGGAGGCCAGC  
 GCCGCGCTCACCGCAGGACCGGGCCGCTGGCCACCAGCCGCATACCACAAGCAAGTGTCCCTGTGCG  
 ACGTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR226069 protein sequence  
 Red=Cloning site Green=Tags(s)

MARPDPSAPPSLLLLLLAQLVGRAAAASKAPVCQEITVPMCRGIGYNLTHMPNQFNHDTQDEAGLEVHQF  
 WPLVEIHCSPDLRFFFLCSMYTPICLPDYHKPLPPCRSVCERAKAGCSPLMRQYGFAPPERMSCDRLPVLG  
 GDAEVL CMDYNRSEATTASPKSFPKPTLPGGPAPSSGGECPSGGPSVCTCREPFVPILKESHPLYNKV  
 RTGQVPCAVPCYQPSPPDERTFATFWIGLWSVLCFISTSTTVATFLIDMERFRYPERP IIFLSACYLC  
 VSLGFLVRLVVGHASVACSREHSHIHETTGPALCTVVFLLVYFFGMASSIWWWILSLTWFLAAGMKWGN  
 EAIAGYAQYFHLAAWLIPSVKSITALALSSVDGDPVAGICYVGNQNLNSLRGFLVPLVLLVGLFLL  
 AGFVSLFRIRSVIKQGGTKDKLEKLMIRIGIFLLYTPASIVVACYLYEQHYRESWEAALTCACPGPD  
 AGQPRAKPEYWVLMKLYFMCLVVGITSGVWIWSGKTLESWRRFTSRCCSSRRGHKSGGAMAAGDYAEAS  
 AALTGRTGPPGPTAAYHKQVSLSHV

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_022721

**ORF Size:** 1758 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\\_022721.2](#), [NM\\_022721.3](#), [NP\\_073558.2](#)

**RefSeq Size:** 6930 bp

**RefSeq ORF:** 1758 bp

**Locus ID:** 14367

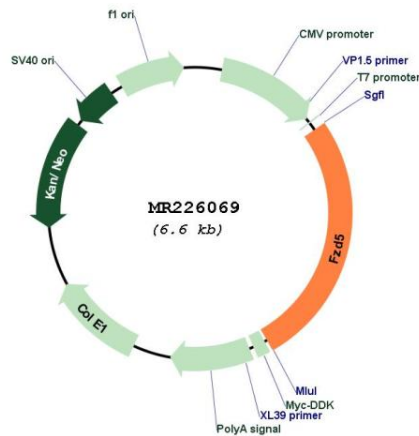
**UniProt ID:** [Q9EQD0](#)

**Cytogenetics:** 1 32.74 cM

**MW:** 64.1 kDa

**Gene Summary:** Receptor for Wnt proteins (PubMed:11092808, PubMed:18230341). Can activate WNT2, WNT10B, WNT5A, but not WNT2B or WNT4 (in vitro); the in vivo situation may be different since not all of these are known to be coexpressed (PubMed:11092808). In neurons, activation of WNT7A promotes formation of synapses (By similarity). Functions in the canonical Wnt/beta-catenin signaling pathway (PubMed:18230341). The canonical Wnt/beta-catenin signaling pathway leads to the activation of disheveled proteins, inhibition of GSK-3 kinase, nuclear accumulation of beta-catenin and activation of Wnt target genes (PubMed:18230341). A second signaling pathway involving PKC and calcium fluxes has been seen for some family members, but it is not yet clear if it represents a distinct pathway or if it can be integrated in the canonical pathway, as PKC seems to be required for Wnt-mediated inactivation of GSK-3 kinase. Both pathways seem to involve interactions with G-proteins. May be involved in transduction and intercellular transmission of polarity information during tissue morphogenesis and/or in differentiated tissues (Probable). Plays a role in yolk sac angiogenesis and in placental vascularization (PubMed:11092808).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR226069