

## Product datasheet for **MC203642**

### Fzd1 (NM\_021457) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Fzd1 (NM_021457) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Fzd1
Synonyms:	AW227548; FZ-1; Fz1
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF: >BC053010  
GCGGCGGAGAAGGAGGAGCGGAGGCGCAGGGGGACCCAGGGCGGCTAGGCTGCCGAGAGTTGGGCGCT  
CCTCTGCCCGGCTGCGACCACTAACCGCGCGCCGCTGACAAGAGCCACAGCCTGCCGCGGGCCAGGGAA  
GAGGGACGCGACCCCGGCGCGCCTGACCACTCTTGCTCTCCTCGCCGCCGCGCTTCATGAACCGCAAG  
TTTCCGCGGCGGCGGCGGCGGCTGCGGGACGCGGAGCAGAATCCCGGGGAGCGGGCAGAGAGCGGCCGA  
CCCCGACGGAGGGCAGGGCGACCACTCTCCCGGATCACAGTGGGAGCCACCACCCGCCGCGCCGCTGC  
CCGTCCCAGTCAATCCGCGCCGAGGAGGGAGCCGAAAAAGTATGGCTGAGGAGGCGGCGCCTAGCGAGTC  
CCGGGCCCGCGGCGGCTGAGCTTGAACCTTTGTGCCAAGCACTCCCGGGCCGGCGGGAGGAGTGGGG  
CACGAGGACACGGCCAGCCACCGCCGCCCGGGCTGATCCCGGCGTTGGGCTAGCGGGCTGCTGCTGC  
TGCTTTGGTTGCTGGAGGCTCCTCTGCTTTTGGGGTCCGAGCGCAGGCGCGGGCCAGGTATCCGGGCC  
GGCCAGCAAGCCCGCCGCCCGCCAGCCCGCAGCAGAGCGGGCAGCAGTACAACGGCGAACGGGGCATC  
TCCATCCCGACACGGCTACTGCCAGCCCATCTCCATCCCGCTGTGCACGGACATCGCGTACAACCAGA  
CCATCATGCCAACCTGCTGGGCCACACGAATCAGGAGGACGCCGCTCTGGAGGTGCACCAAGTTCTACCC  
TCTGGTGAAGGTGCAGTGTCCGCGGAGCTCAAGTTCTTCTGTGCTCCATGTACGCGCCTGTGTGCACC  
GTACTGGAGCAGGCGCTACCGCCCTGCCGCTCCCTGTGCGAGCGCGCACGCCAGGGCTGCGAGGCGCTCA  
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AGTAATCCGCAGCACGGCGCGGTGTTACCGCGCGGCTACCCGGGGGTGCCGGGACGGTGGAGCGGG  
GAAAGTTCTCTGCCCGCGCCCTCAGGGTGCCTCCTACCTCACTACCCTTTTGGGGGAGAAGGA  
CTGCGGCCACCCCTGCGAACCCACCAAGGTTTACGGGCTCATGTACTTCGGGCCAGAGGAGCTGCGCTTC  
TCGCGCACCTGGATAGGCATCTGGTCCGTGCTGTGCTGCGCCTCCACGCTCTTACGCGTGTCCAGTACC  
TAGTGGACATGCGGCGCTTACGCTACCCGGAACGGCCCATCATTTTCTGTCCGGCTGTTACACAGCGGT  
GGCGGTGGCTACATCGCTGGCTTTCTGTTGGAGGACCGGGTGGTGTGCAACGACAAGTTTGCAGAGGAC  
GGGGCGCGCACGGTGGCGCAGGGCACTAAGAAAGAAGGCTGCACTATACTCTTTATGATGCTCTACTTCT  
TCAGCATGGCCAGCTCCATCTGGTGGGTGATCCTGTCCCTCACCTGGTTCCTGGCAGCCGGCATGAAGTG  
GGGCCACGAAGCCATCGAGGCCAACTCACAGTATTTCCATTTAGCCGCTGGGCTGTGCCAGCCATCAA  
ACTATAACCATCTTGGCGTTGGGCCAGGTGGATGGCGACGTAAGAGCGGAGTGTGTTTTGTGGGCTCA



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ACAACGTGGACGCACTGCGTGGCTTTGTGCTGGCGCCTCTCTTCGTTTATCTGTTCAATTGGCACTTCTTT  
 CCTGCTGGCCGGTTTCGTGTCACTCTTCCGCATCCGCACCATCATGAAGCATGACGGCACCAAGACAGAG  
 AAGCTGGAGAAGCTCATGGTGCGCATCGGAGTCTTCAGTGTCTCTACACTGTGCCGGCCACCATCGTCA  
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 ACCTTCTTAACAGGATAGTAGAACATACACAGAGTATGGAAACCTAAGGAGATTTTCAAGTGAAGTGGAGT  
 TACTCCAAGTGAACCGTGTCTTCTGGTTTTAGCCAACTGCAATTAGATGTGTCTTTGCAATCTAAAAAG  
 TTGTACACAATCAACAATACACTTTGCTTACTCCTCAGCAGCACATTCTGAGGGAGAAAACAGTACACCC  
 CCGCAGAAAGCCTGGTTGGACTTCCGAAGACAGAGGGGTTGGACTGACGGATGGGTGAGAGAGACAAAACA  
 CGACCTAGGCATGCATGCTGAAGGGGAAGTGTGCCATTCTACTGCATCCCATCTTGTGTGCTCCTGTC  
 TGGATTTACGGCAGTGTGCAAAATGAAATCTCTCAAAGCCATTTAAAAATACTCACTTTAGTTATGGAT  
 GAAGAAGAGGAGAAAAGCAGTCCCTCCTGATTGTAGTGTTTAAACCTTAAGAGTTTATCACAATGCCGAT  
 ACATACATAGGACCTAAATTTATCTATGTCTGTACATCCCTAAAATGACATTGGTTTTTTGGATTTGGTAT  
 GCATTATTATTGTTATTATTGTTATTATTCTCACCACCATGAGATCATCTATATTTATAGAGGAATA  
 GAAGTTTATATATATAAAATGCCATATTTTTAATTTTCGCAAAATAAAAAATGAAAGTTTTGTACAAAATT  
 ACAAAAAAAAAAAAAAAAAA

- Restriction Sites:** Ascl-NotI
- ACCN:** NM\_021457
- Insert Size:** 1929 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:**

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:** [BC053010](#), [AAH53010](#)

**RefSeq Size:** 4150 bp

**RefSeq ORF:** 1929 bp

**Locus ID:** 14362

**UniProt ID:** [O70421](#)

**Cytogenetics:** 5 2.61 cM

**Gene Summary:** Receptor for Wnt proteins (PubMed:15923619). Activated by WNT7B (PubMed:15923619). Activated by WNT3A, WNT3, WNT1 and to a lesser extent WNT2, but apparently not by WNT4, WNT5A, WNT5B, WNT6, WNT7A or WNT7B (By similarity). Contradictory results showing activation by WNT7B have been described for mouse (PubMed:15923619). Functions in the canonical Wnt/beta-catenin signaling pathway (PubMed:15923619). 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:15923619). 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).[UniProtKB/Swiss-Prot Function]