

Product datasheet for **MG209705**

Fzd1 (NM_021457) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Fzd1 (NM_021457) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Fzd1
Synonyms:	AW227548; FZ-1; Fz1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG209705 representing NM_021457
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTGAGGAGCGCGCCTAGCGAGTCCCGGGCCGCCGGCTGAGCTTGGAACTTTGTGCCGAAG
 CACTCCCGGGCCGGCGGAGGAGGTGGGCACGAGGACACGGCCAGCCACCGCCGCCCGGGCTGATCC
 CCGGGCTTGGGCTAGCGGGCTGCTGCTGCTTTGGTTGCTGGAGGCTCCTCTGCTTTGGGGTCCGA
 GCGCAGCGCGGGCCAGGTATCCGGGCGGGCCAGCAAGCCCGCCGCCAGCCAGCCAGCAGAGCG
 GGCAGCAGTACAACGGCAACGGGGCATCTCCATCCCGGACCACGGCTACTGCCAGCCATCTCCATCCC
 GCTGTGCACGGACATCGCGTACAACCAGACCATCATGCCAACCTGCTGGGCCACACGAATCAGGAGGAC
 GCCGGTCTGGAGGTGCACCAGTTCTACCCTCTGGTGAAGGTGCAGTGTCCGCCGAGCTCAAGTTCTTCC
 TGTGCTCCATGTACGCGCTGTGTGCACCGTACTGGAGCAGGCGCTACCGCCCTGCCGCTCCTGTGCGA
 GCGCGCACGCCAGGGCTCGGAGGCGCTCATGAACAAGTTCGGCTTCCAGTGGCCAGACACTCAAGTGC
 GAGAAGTTCCTGGTGCACGGCGCAGGAGAGCTGTGCGTGGGCCAGAACAGTCCGACAAAGGCACCCCAA
 CTCCTCCTTGCTACCAGAGTTCTGGACCAGTAATCCGCAGCACGGCGCGGTGGTTACCGCGGGGCTA
 CCCGGGGGTGCCGGACGGTGGAGCGGGAAAGTTCTCCTGCCCGCGCCCTCAGGGTGCCTCCTAC
 CTCAACTACCACTTTCTGGGGGAGAAGGACTGCGGCGCACCTGCCAACCACCAAGGTTACGGGCTCA
 TGTACTTCGGGCCAGAGGAGCTGCGCTTCTCGCGCACCTGGATAGGCATCTGGTCCGTGCTGTGTCGC
 CTCCACGCTTTCACGGTGTACAGTACCTAGTGGACATGCGGCGCTTACGCTACCGGAACGGCCATC
 ATTTTCTGTCCGGTGTACACAGCGGTGGCGGTGGCTACATCGTGGCTTTCTGTTGGAGGACCGGG
 TGGTGTGCAACGACAAGTTTGCAGAGGACGGGGCGCACGGTGGCCAGGGCACTAAGAAGAAGGCTG
 CACTATACTCTTTATGATGCTCTACTTCTTACGATGGCCAGCTCCATCTGGTGGGTGATCCTGTCCCTC
 ACCTGTTCTGCGAGCCGGCATGAAGTGGGGCCACGAAGCCATCGAGGCCAACTCACAGTATTTCCATT
 TAGCCGCTGGGCTGTGCCAGCCATCAAACTATAAACCATCTTGGCGTTGGGCCAGGTGGATGGCGACGT
 ACTGAGCGGAGTGTGTTTGTGGGGCTCAACAACGTGGACGCACTGCGTGGCTTTGTGCTGGCGCTCTC
 TTCGTTTATCTGTTTATTGGCACTTCTTCTGCTGGCCGTTTCGTGTCACTCTCCGCATCCGCACCA
 TCATGAAGCATGACGGCACCAAGACAGAGAAGCTGGAGAAGCTCATGGTGGCATCGGAGTCTTCAGTGT
 CCTCTACACTGTCCGGCCACCATCGTCATCGCCTGCTACTTCTATGAACAGGCCTTTCGGGACCAGTGG
 GAGCGCAGCTGGGTGGCCAGAGCTGCAAGAGTTATGCCATCCCTTGGCCCTCACCTCCAGGGAGGTGGAG
 GAGTCCCACACACCCGCCCATGAGCCAGACTTACAGTCTTATGATCAAGTATCTCATGACCGTGTAT
 TGTGGGATCACATCGGGCTTCTGGATCTGGTCCGGCAAGACACTGAATTCCTGGAGGAAGTTCTACACG
 AGGCTTACCAACAGCAAACAGGGGGAGACTACCGTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG209705 representing NM_021457
 Red=Cloning site Green=Tags(s)

MAEEAAPSESRAAGRLSLELCAEALPGRREEVGHEDTASHRRPRADPRRWASGLLLLLLWLEAPLLLGV
 AQAAGQVSGPGQQAPPPQPQQSGQQYNGERGISIPDHGYCQPIISIPLCDIAYNQTIIMPNLLGHTNQED
 AGLVHQFYPLVKVQCSAELKFLCSMYAPVCTVLEQALPPCRSLCERARQGCEALMNKFGFQWPDTLKC
 EKFPVHGAGELCVGQNTSDKGTPTPSLLPEFWTSNPQHGGGGYRGGYPGGAGTVERGKFSRPRALRVPSY
 LNYHFLGEKDCGAPCEPTKVYGLMYFGPEELRFSRTWIGIWSVLCASLFTVLYLVDMRRFSYPERPI
 IFLSGICYTAVAVAYIAGFLLEDREVVCNDKFAEDGARTVAQGTKEGCTILFMMLYFSSMASSIWWVILSL
 TWFLAAGMKWGHEAIEANSQYFHAAWVPAIKTITILALGQVDGDVLSGVCFVGLNNVDALRGFVLAFL
 FVYLFIGTSFLLAGFVSLFRIRTIMKHDGKTEKLEKLMVRIGVFSVLYTVPATIVIACYFYEQAFRDQW
 ERSWAQSQSCKSYAIPCPHLQGGGGVPPHPMSPDFTVFMIKYLMTLIVGITSGFWIWSGKTLNSWRKFY
 RL TNSKQGETTV

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_021457

ORF Size: 4392 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_021457.3](#), [NP_067432.2](#)

RefSeq Size: 4150 bp

RefSeq ORF: 1929 bp

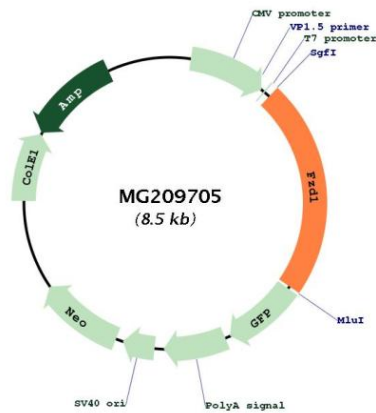
Locus ID: 14362

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]

Product images:



Circular map for MG209705