

Product datasheet for **MR208593**

Fzd4 (NM_008055) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Fzd4 (NM_008055) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Fzd4
Synonyms:	Fz4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR208593 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCCTGGCCGGGCACAGGGCCGAGCAGCCGGGGGCGCCTGGAGGCGTCGGGCTCAGGCTGGGGCTGC
 TGCTGCAGTTGCTCCTGCTCCTGCGGCCGACATTGGGGTTCGGGGACGAGGAGGAGCGGCCCTGCGACCC
 CATCCGCATCGCCATGTGCCAGAACCTCGGCTACAACGTGACCAAGATGCCCAACTTAGTGGGACACGAG
 CTGCAGACAGACGCCGAGCTGCAGCTGACAACCTTACGCGGCTCATCCAGTACGGCTGCTCCAGCCAGC
 TGCAGTTCTTCTTTGTTTCGTTTATGTGCCAATGTGCACAGAGAAGATCAACATCCCCATCGGCCCGTG
 CGGTGGCATGTGCCTTTCAGTCAAGAGACGCTGTGAACCACTGAGAGAAATTTGGGTTTGCCTGGCCC
 GACACCCTGAAGTGCAGCAAGTCCCGCCCAAGACGACCACAACCACATGTGCATGGAAGGACCAGGTG
 ATGAAGAGTTCCCTTGGCCACAAGACTCCCATCCAGCCCGGGGAGAGTGCCACTCCGTGGGAAGCAA
 TTCTGATCAGTACATCTGGGTGAAGAGGAGCCTGAAGTGTCTCAAGTGTGGCTACGATGCTGGCTTG
 TACAGCCGCTCAGCTAAGGAGTTCACGGATATTTGGATGGCTGTGTGGCCAGCCTCTGCTTCATCTCCA
 CCACCTTACCCTGCTGACCTTCTGATTGATTATCCAGTTTTCTTACCCTGAGCGCCCCATCATATT
 TCTCAGTATGTGCTATAATTTATAGCATTGCTTATATTGTTCCGGCTGACTGTAGGCCGGGAAAGGATA
 TCCTGTGATTTTGAAGAGCGGCCAGAGCCGTTCTCATCCAAGAAGGACTTAAGAACACAGGATGTGCAA
 TAATTTCTTGCTGATGTACTTTTTTGGAAATGGCCAGTCCATTTGGTGGGTTATTTGACACTCACTTG
 GTTTTTGGCAGCCGACTCAAGTGGGTCATGAAGCCATTGAAATGCACAGTTCTATTTCCACATCGCA
 GCCTGGGCTATCCCGCAGTGAAGAACCTGTCATCTTGATTATGAGACTAGTGGATGCCGATGAAGTGA
 CTGGCTTGTGCTATGTTGGGAACCAAACTAGATGCCCTCACTGGCTTGTGGTGGCTCTCTCTTTAC
 GTATTTGGTGATTGGAACGCTGTTCAATGCGCGGGTTTGGTGGCCTTATTCAAAATTCGGTCCAATCTT
 CAAAAAGACGGGACAAAGACAGACAAGTTGAAAAGGCTAATGGTCAAGATCGGGGCTTCTCAGTACTGT
 ACACGGTCTCTGCAACCTGTGTGATTGCCTGTTATTTCTATGAAATCTCAAAGTGGGCACTCTTTGATA
 TTCTGCAGATGACTCAAACATGGCAGTTGAAATGTTGAAAATTTTATGTCTTTGCTCGTGGGCATCACT
 TCAGGCATGTGGATTTGGTCTGCCAAAACCTTTCACACGTGGCAAAGTGTCTAACCGATTGGTGAATT
 CTGGGAAGGTAAGAGAGAGAAGAGGGGAATGGTTGGGTGAAGCCAGGAAAAGGCAACGAGACTGTGGT
 A

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR208593 protein sequence
 Red=Cloning site Green=Tags(s)

MAWPGTGPSSRGAPGGVGLRLGLLLQLLLLLRPTLFGFDEEERRCDPIRIAMCQNLGYNVTKMPNLVGHE
 LQTDALQLTTFPLIQYGCSSQLQFFLCSVYVPMCTEKNIPIGPCGMCLSVKRRCEPVLREFGFAWP
 DTLNCSKFPPQNDHNHMCMEGPGDEEVPLPHKTIQPGECHSVGSNSDQYIWKVRLNCLVKCYDAGL
 YSRSAKEFTDIWMAVWASLFCISTTFTVLTFLIDSSRFSPYPERPIIFLSMCYNIYSIAYIVRLTVGRERI
 SCDFEEAAEPVLIQEGLKNTGCAIIFLLMYFFGMASSIWWVILTLTWFLAAGLKWGHEAIEMHSSYFHIA
 AWAIPAVKTIVILIMRLVDADEL TGLCYVGNQNLDALTFVAVPLFTYL VIGTLFIAAGLVALFKIRSNL
 QKDGTKDKLERLMVKIGVFSVLYTVPATCVIACYFYEISNWALFRYSADDSNMAVEMLIKIFMSLLVGIT
 SGMWIWSAKTLHTWQKCSNRLVNSGKVKREKRGNGWVKPGKGNETVV

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_008055

ORF Size: 1614 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_008055.1](#), [NM_008055.2](#), [NM_008055.3](#), [NM_008055.4](#), [NP_032081.2](#)
RefSeq Size: 3685 bp

RefSeq ORF: 1614 bp

Locus ID: 14366

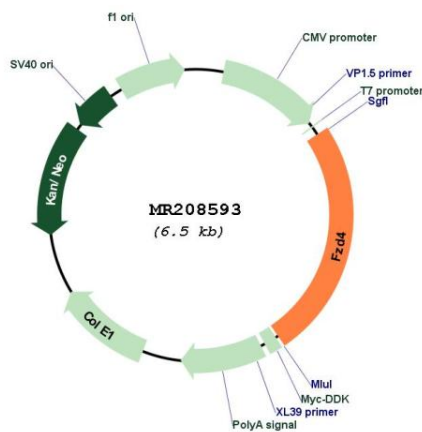
UniProt ID: [Q61088](#)

Cytogenetics: 7 49.32 cM

MW: 60.1 kDa

Gene Summary: Receptor for Wnt proteins. Most of frizzled receptors are coupled to the beta-catenin (CTNNB1) canonical signaling pathway, which leads to the activation of disheveled proteins, inhibition of GSK-3 kinase, nuclear accumulation of beta-catenin (CTNNB1) and activation of Wnt target genes. Plays a critical role in retinal vascularization by acting as a receptor for Wnt proteins and norrin (NDP). In retina, it can be both activated by Wnt protein-binding, but also by a Wnt-independent signaling via binding of norrin (NDP), promoting in both cases beta-catenin (CTNNB1) accumulation and stimulation of LEF/TCF-mediated transcriptional programs. 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. Activation by Wnt5A stimulates PKC activity via a G-protein-dependent mechanism.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR208593