

Product datasheet for **MR207910**

Fzr1 (NM_019757) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	Fzr1
Synonyms:	AW108046; Cdh1; Fyr; FZR; FZR2; HCDH; HCDH1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



ORF Nucleotide Sequence: >MR207910 representing NM_019757
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAACTACGACTCACTATAGGGCGGCCGGAATTCGTCTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGACCAGGACTATGAGCGAAGGCTCTGCGGCAGATCATCATCCAGAATGAGAACACAGTGCCCTGTG
 TTTCAGAGATGCGGAGAACCTTGACACCAGCCAACTCCCAGTGTCTTACCCAGCAAGCATGGTGACCG
 CTTTCATCCCCTCGCGGGCCGGGCCAACTGGAGCGTGAATTCACAGGATCAATGAAAATGAGAAGTCC
 CCCAGCCAGAACCGCAAGGCAAGGACGCCACCTCGGACAATGGCAAGACGGCCTGGCCTACTCCGCAC
 TGCTGAAGAATGAGCTGCTGGGTGCCGGCATCGAGAAGGTTGAGGACCCACAGACGGAGGACCGCGGCT
 GCAGCGGTCCACACAGAGCAAGGAGGCTCTTTACGTATTCCTCAGCAGCAAGCGCTCGAGTCCAGAT
 GATGGCAATGACGTGTCCCATCTCTGTCCCCGTTAGCAACAAAAGTCAGAAGCTGCTGCGGTGAC
 CACGGAAGCCACACGCAAGATCTCTAAGATTCCTTCAAGGTGCTGGACGCGCCAGAGCTTCAGGACGA
 CTTCTACCTCAACTTGGTGGACTGGTCTCCCTCAACGTGCTCAGCGTGGGGCTGGGCACCTGCGGTGAC
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 AGTCAGAGCGCGGCTGCAGGGCCACCGCAGGAAGTGTGGCCTAAAGTGGTCCACAGACCAAGCT
 GCTTGCTCGGGGGCAATGACAACAAGCTGCTCGTGTGGAACCACTCTAGTCTAAGCCCTGTGCAGCAG
 TATACGGAGCACCTGGCAGCCGTGAAGGCTATTGCCTGGTCCCCACACAGCATGGACTGCTGGCATCTG
 GTGGTGGCAGGCTGACCGCTGCATCCGATTCTGGAACACTCTGACAGGTCAGCCACTGCAGTGCATTGA
 CACAGGCTCACAAGTGTGCAACCTGGCCTGGTCCAAGCAGCCTAAGTGGTGGTGCACACATGGCTAC
 TCACAGAACCAGATCCTCGTGTGGAAGTACCCGTCCTTACGAGGTGGCAAGCTCACTGGCCACTCAT
 ATCGTGTCTCTACCTGGCCATGTCCCCTGATGGGGAGGCCATAGTCACCGGAGCTGGAGATGAGACCT
 GAGGTTCTGGAATGTCTCAGCAAAACAGCTCTACAAAGGAATCTGTGTCTGTGCTCAACCTCTTACC
 CGGATCCGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR207910 representing NM_019757
 Red=Cloning site Green=Tags(s)

MDQDYERRLLRQIIQNENTVPCVSEMRRLTPANSPVSSPSKHGDRFIPSRAGANWSVNFHRIENENEKS
 PSQNRKAKDATSDNGKDLAYSALLKNELLGAGIEKVQDPQTEDRRLQPSTPEHKGLFTYSLSSKRSSPD
 DGNDVSPYSLSPVSNKSQKLLRSPRPKTRKISKIPFKVLDAPQLQDDFYLNLDVWSSLNVLVGLGTCVY
 LWSACTSQVTRLCDLVEGDSVTSVGWSEGRNLVAVGTHKGFVQIWDAAAGKKLSMLEGHTARVGALAWN
 ADQLSSGSRDRMILQRDIRTPPLQSERRLQGHREQEVCGLKWDHQLLASGGNDNKLVLVNHSSLSPVQQ
 YTEHLAAVKAIASPHQHGLLASGGTADRCIRFWNTLTGQPLQCIDTGSQVCNLAWSKHANELVSTHGY
 SQNQILVWKYPSLTQVAKLTGHSYRVLYLAMSPDGEAIVTGAGDETLRFWNVFSKTRSTKESVSVLNLFT
 RIR

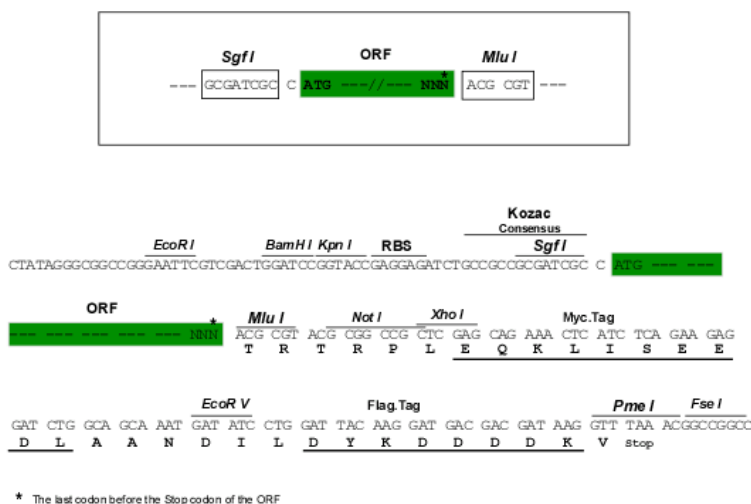
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9039_b07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_019757

ORF Size: 1479 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.

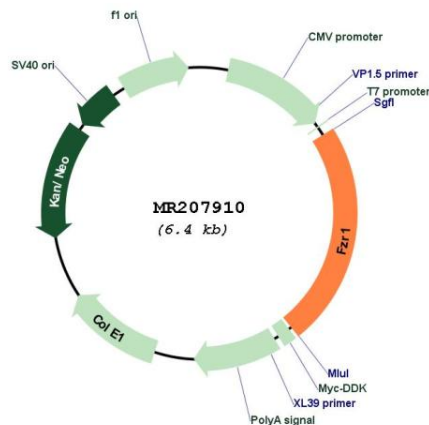
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22µm filter is required.

RefSeq: NM_019757.1, NP_062731.1

RefSeq Size:	2258 bp
RefSeq ORF:	1482 bp
Locus ID:	56371
UniProt ID:	Q9RIK5
Cytogenetics:	10 C1
MW:	55.1 kDa

Gene Summary: Substrate-specific adapter for the anaphase promoting complex/cyclosome (APC/C) E3 ubiquitin-protein ligase complex. Associates with the APC/C in late mitosis, in replacement of CDC20, and activates the APC/C during anaphase and telophase. The APC/C remains active in degrading substrates to ensure that positive regulators of the cell cycle do not accumulate prematurely. At the G1/S transition FZR1 is phosphorylated, leading to its dissociation from the APC/C. Following DNA damage, it is required for the G2 DNA damage checkpoint: its dephosphorylation and reassociation with the APC/C leads to the ubiquitination of PLK1, preventing entry into mitosis. Acts as an adapter for APC/C to target the DNA-end resection factor RBBP8/CtIP for ubiquitination and subsequent proteasomal degradation. Through the regulation of RBBP8/CtIP protein turnover, may play a role in DNA damage response, favoring DNA double-strand repair through error-prone non-homologous end joining (NHEJ) over error-free, RBBP8-mediated homologous recombination (HR).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR207910