

## Product datasheet for MR217140

### Wdfy2 (NM\_175546) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Wdfy2 (NM_175546) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Wdfy2
Synonyms:	5830485M08; B130024L21Rik; ProF; ZFYVE22
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR217140 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGCGGAGATCCAGCCCCAGCCACTGACCCGCAAGCCGATCCTGCTGCAGCGGGTCGAGGGGTGCG  
AGGAGGTGGTCAACATGGCGGTATTGTACCTAAAGAAGAGGGTGTATCAGCGTCTCGGAGGACAGGAC  
AGTTCGTGTTGGTTAAAGAGGGACAGTGGACAGTACTGGCCAAGCATCTACCATGCAATGCCTTCTCCA  
TGTTTCATGCATGTCTTTAACCCGAAACAAGAAGACTGTCCATAGGTCTAGACAATGGTACAATCTCAG  
AGTTTATTTGTCTGAAGATTATAACAAGATGACACCTGTGAAAACTATCAAGCACATCAGAGCAGAGT  
AACGATGGTCTGTTTGTCTGGAAGTGGAGTGGGTGCTGAGCACAGGACAGGACAAGCAGTTTCGCCTGG  
CACTGCTCTGAGAGTGGACAGCGCTGGGAGGTTACCGCACCAAGTGTGTGGCCTCAGGCCGTCAATTTG  
ATGTTGAAACCCGTCATGTGTTTATTGGCGATCACTCGGGCCAAGTAACCATCCTCAAATGGAACAAGA  
AACTGCACACTGCTCACATCCTTCAGAGGGCACACAGGAGGGGTGACAGCACTCTGCTGGGACCCGGTG  
CAGCGCGTGCTATTCTCAGGCAGTTCGGATCACTCTGTATCATGTGGGACATCGGTGGGAGAAAAGGCA  
CGGCCATCGAACTCCAAGGACACAATGACAAAGTCCAGGCCCTCCTATGCACAGCACACAGCAGCT  
CATCTCATGTGGCGGTGACGGTGGCATTGTCTGGAACATGGATGTGGAAGGCAGGAGACCCCTGAG  
TGTTGGACAGTACTCCTGCCAAAAGTGTGACCAGCCTTCTTCTGGAACCTCAAGCAAATGTGGGACA  
GTAAGAAAATTGGACTAAGACAGCACCCTGCCGGAAGTGTGGGAAGCCGTGTGCGGCAAGTGTAGCTC  
CAAGCGCTCTTCCATCCCACTCATGGGCTTTGAGTTTGAAGTGCAGGCTGCGACAGCTGCCACGAGGCC  
ATCACAGATGAAGAACGCGCCCCACAGCCACCTTCCATGACAGTAAGCATAACATTGTGCATGTGCATT  
TCGATGCAACCAGGGATGGTTACTGACTTCTGGAAGTACAAGGTAATTAAGCTGTGGGACATGACCCC  
AGTGGTGTCA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR217140 protein sequence  
 Red=Cloning site Green=Tags(s)

MAAEIQPQLTRKPILLQRVEGSQEVVNMMAVIVPKEEGVISVSEDRTVRVWLKRDSGQYWPSIYHAMPSP  
 CSCMSFNPETRRLSIGLDNGTISEFILSEYDKMTPVKNYQAHQSRVMTVLFVLELEWVLTSTGQDKQFAW  
 HCSESGQRLGGYRTSAVASGLQFDVETRHFVIGDHSQVITLKLEQENCTLLTSFRGHTGGVTALCWDPV  
 QRVLFSGSSDHSVIMWDIGGRKGTAIELQGHNDKVQALSYAQHTRQLISCGGDGGIVVWNMDVERQETPE  
 WLDSQKCDQPFWFNFKQMWDSKKIQLRQHCRKCGKAVCGKCSSKRSSIPLMGFEFEVVRVCDSCHEA  
 ITDEERAPTATFHDSKHNIHVHFDATRGWLLTSGTDKVIKLWDMTPVVS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_175546

**ORF Size:** 1203 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\\_175546.4](#), [NP\\_780755.2](#)

**RefSeq Size:** 2011 bp

**RefSeq ORF:** 1203 bp

**Locus ID:** 268752

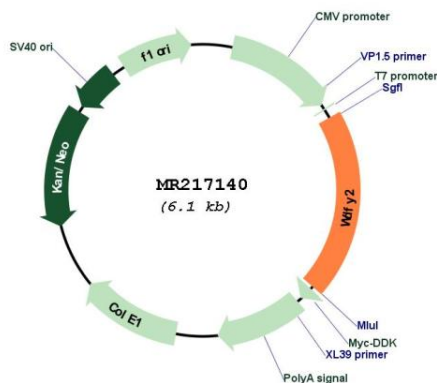
**UniProt ID:** [Q8BUB4](#)

**Cytogenetics:** 14 D1

**MW:** 45.1 kDa

**Gene Summary:** Acts in an adapter protein-like fashion to mediate the interaction between the kinase PRKCZ and its substrate VAMP2 and increases the PRKCZ-dependent phosphorylation of VAMP2 (By similarity). Positively regulates adipocyte differentiation, by facilitating the phosphorylation and thus inactivation of the anti-adipogenetic transcription factor FOXO1 by the kinase AKT1 (PubMed:18388859). Plays a role in endosomal control of AKT2 signaling; required for insulin-stimulated AKT2 phosphorylation and glucose uptake and insulin-stimulated phosphorylation of AKT2 substrates (PubMed:20189988). Participates in transferrin receptor endocytosis (By similarity).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR217140