

## Product datasheet for **MG202245**

### Wdyhv1 (NM\_029734) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Tag:** TurboGFP  
**Symbol:** Wdyhv1  
**Synonyms:** 2410187C16Rik; AU014961; AW550036; Ntaq1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)

**ORF Nucleotide Sequence:** >MG202245 representing NM\_029734  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGGAGGGGACGGCCCGCCGCCACGGCCCGCAGTACCAGCCGGTCTGTCTACGCGGGACGCATGTG  
 TCTACAACAGCTGTATTGTGAGGAAAACATTTGGAAGCTCTGTGAGTACATCAAGACACACAACCGTA  
 TCTGTTGGAGGAGTGCTATGCAGTCTTCATATCAAATGAGAAGAAGATGGTACCTATTTGGAACAGCAG  
 GCAAGACCTGAGAATGGACCTGTGATCTGGGACTACCATGTGGTTCGCTTCATGTCAAGGGAAGGAC  
 AAAGCTTCATTTATGATCTTGACACTATTTTGCCATTTCCCTGCCCTTTTCGACATTTACATAGAAGATGC  
 CCTTAAGTCTGATGATGACATTCATCTGCAGTTTAGGAGGAAATTTAGAGTGGTTCGTGCTGACTCCTAC  
 TTGAAGCACTTCGCTTCTGACCGGTCTCACATGAAAGACTCCAGTGGGAACTGGAGAGAGCCTCCCCAG  
 AGTACCCTGCATTGAAACTGGAGACTCCAAAATGAACCTGAACGACTTCATCAGCATGGACCCTGCAGT  
 AGGATGGGAGCTGTCTACACGCTGCCTGAGTTTGTGCATCGGTTACAGCAGAAAACCTACCAAGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG202245 representing NM\_029734  
 Red=Cloning site Green=Tags(s)

MEGDGPAATAPQYQVPCPTRDACVYNSCYCEENIWKLCEYIKTHNQYLLEECYAVFISNEKKMVPWIKQQ  
 ARPENGPVIWDYHVLLHVSREGQSFYDLDTILPFPCPFDIYIEDALKSDDDIHLQFRRKFRVVRADSY  
 LKHFASDRSHMKDSSGNWREPPPEYPCIEGTGDSKMNLNDFISMDPAVWGAVYTLPEFVHRFSSKTYQA

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI



**Cloning Scheme:**


**ACCN:** NM\_029734

**ORF Size:** 627 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 0.22um filter is required.

**RefSeq:** [NM\\_029734.2](#)

**RefSeq Size:** 1354 bp

RefSeq ORF: 630 bp

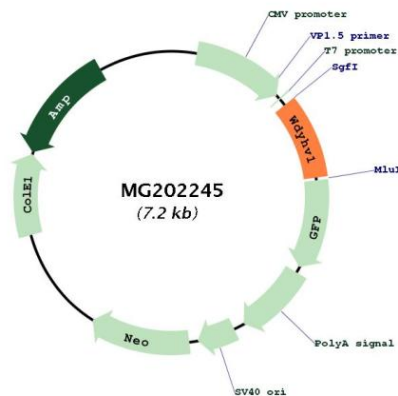
Locus ID: 76773

UniProt ID: [Q80WB5](#)

Cytogenetics: 15

**Gene Summary:** Mediates the side-chain deamidation of N-terminal glutamine residues to glutamate, an important step in N-end rule pathway of protein degradation. Conversion of the resulting N-terminal glutamine to glutamate renders the protein susceptible to arginylation, polyubiquitination and degradation as specified by the N-end rule. Does not act on substrates with internal or C-terminal glutamine and does not act on non-glutamine residues in any position. Does not deaminate acetylated N-terminal glutamine. With the exception of proline, all tested second-position residues on substrate peptides do not greatly influence the activity. In contrast, a proline at position 2, virtually abolishes deamidation of N-terminal glutamine. [UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MG202245