

## Product datasheet for **MC225052**

### Wdr81 (NM\_138950) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Wdr81 (NM\_138950) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Wdr81  
**Synonyms:** BC054822; Gm883; mFLJ00182; nur5  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC225052 representing NM\_138950  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGC**C

ATGGCCCAGGGGAGCAGAAGGCCGAAAGTGTTCTTACAGCAGGGTCCGAGGGCTGGTCCCCTTCTCAG  
 GACCTGACATGGAGGAGCTGCTCCGGAGCGTGGAGAGAGATCTGAACATTGATGCCCGGCAGCTGGCCCT  
 GGGCCCGGGGGCACTCATGTAGTGGCCCTAGTGTCCACGCGTTGGCTGGCTAGTCTCCGGGAGCGCCGA  
 CTGGGACCCCTGTCCCGGGCTGAGGGCCCTGGGTGAAGCAGAAGTCAGGACTTTACTGCAACGTTCCGTAC  
 AGAGGGTGCACCCAGGCTGGACTCGAGTGGAGGTGCATGGGCTGCGGAAACGGAGACTGTCTACCCGCT  
 GGGTGGAGGCGTGCCCTTTGAGGAGGGGTCTGTAGCCCTGAAACTCTCACTCGGTTTCATGCAGGAGGTG  
 GCTGCCAGAATTACCGAACCTGTGGCGCCATGCATACCACACTTATGGACAGCCTTACAGCCACAGCA  
 CTGCCCCCTCAGCTCTACCTGCCTAGACTCTATACGACAAGCTCTCCAGAGGGTGTATGGATGCACCTT  
 CTTGCCAGTGGGTGAATCCATCCATGTCTATCAAATGTCAGGGATGGGCCCTGCCCTCTCGGGGCAGC  
 CCTGCCTGCCCCAGCCTTTTGCAGCTGAGGCTTTGCTGGAGTCGCCCCGAGATGCTCTATGTGGTACACC  
 CTTATGTGCAATTCTCCCTGCATGATGTAGTTACCTTCAGCCCTGCCAAGCTGACCAACAGCCAAAGCCAA  
 GGTGCTCTTTCTCTCTCCGTGTTCTGAGGGCCATGGATGCCTGTACCAGCCAGGGCTGGCCTGTGGG  
 GCTCTGTCTTTGCACCACATTGTGTAGACGAGAAGCTATGCAGTGAAGTCCGGCTGGACCTGAGCGCTT  
 ACGAGATGCCTTCCGAGGATGAAAACAGGAGGGCTCTGAAGAGAAAAATGGGACAGGCATTAAGTCTGA  
 AAAAGAGGGGGAAGGGAGAAGTGAAGTGTCCACCTGCCAGAAAGAACTTCGGGGCCTTGTGCTAGACTGG  
 GTCCATGGCCGAATCAGCAACTTCCACTACCTCATGCAGCTGAATCGGTTGGCAGGTGACGGCAGGGGG  
 ATCCAACTATCACCCAGTGTGCCCTGGTGGTGGACTTTACCACACCTTATGGGCGCTTCCGAGACCT  
 TCGTAAATCCAAGTTCGACTCAACAAGGGAGATAAGCAATTGGACTTACCTATGAGATGACCCGGCAG  
 GCATTTGTTGCAGGTGGTGCAGGAAGTGGGAGCCACCCCATGTTCTCACCACATCTCTGACGTGCTCT  
 CTGACATCACGTACTATGTATACAAGGCCCGTCGCACACCGCGCTCGGTGCTCTGTGGACATGTCCGAGC  
 GCAGTGGGAACCCACGAGTATCCTGCCACCATGGAGCGGATGCAGACCTGGACACCGGATGAGTGCATA  
 CCCGAGTTCTACACGGACCCCTCTATCTTTGCTCTATCCACCCTGACATGCCCGACCTGGATGTGCCGG



[View online >](#)

CCTGGTGCAGTTCTAACCAGGAATTTGTGGCTGCCATCGAGCCCTCCTGGAGAGCTGGGAGGTGTCCCA  
 AGACCTGCATCACTGGATTGATCTTACCTTTGGCTACAACTCCAGGGCAAAGAAGTGTGAAGGAGAAG  
 AATGTGTGTCTGCACCTGGTGGACGCTCACACCATCTGACCAGCTATGGCGTGGTACAGCTATTTGATC  
 AGCCACACCCCAACGCTGGCTGGATCTCTGCCCTGGCCCCGAACCTCCACTCATCCCCGGCTGTT  
 GGTCCAGCCTATTCGGGAGGCCACAGGCCAGGAGGACATTTAGGACAATTAATAATGGTGCGGCAGG  
 CTTGTCGTAGAGGCCACTCCATGTGAGACTGGCTGGACTAGAGATAGGCTGGACAGGAGAAGATGATT  
 TAGAACAGGCTACAGAAGCTCTGGATTCCATCTCCCTCCCCGGAAAGCAGGTGACCAGCCAGGCTCTTC  
 CTCAGTCAAGCATCACCTGGCCTGTTGTCTTTTCTGCACCCTCGGGGTCTCGACCAGCCGTAGGAGC  
 AAAGCTGCCGGTGGACCTGGGAGGGTGAAGAGGGCAAGATTGCTCTTCCAGAGGGCTTCAGTCCCA  
 TACAGGCTTGGAAAGAGCTGGAGAAAGTGGTAACTTCTGGCCAAAGGCTAGGGAGCCAGTTGGAGGA  
 GCCTGAAAAGCCTCACGCCAGCCACCTGTGCACCTGCAGAGCCTTTCATCGAGACATGCAGGTCCTG  
 GGTGTCCTGTTGGCTGAGATGGTGTGGCCACCAGGTCGGATACTGCAGCCTGATGCACCTTTGTGGG  
 TACGCTTTGAGGCTGTTGGGGTCTCTGCATACGCCACTCCAAGGACATCCCCGTGTCTGCAGCCTGT  
 GCTAGACACACTCCTACAGCTGAGCGGACCCAAAAGTCCCATGGTGTGGAAGAAGGGCAAGCTAGACCCA  
 CTGTTTGTAGTATAGGCCGTTTCCAGGGATTACCCACCCAGCCAGCCAGCTCCTCAGCCCCTTCA  
 GCTCCGTGGTCCCTTCCCTCCATACTCCAGCACTGCAAGTTCATTCTTTTATATCAGGCCCGGGC  
 TGTGGAGGATGAGGTCCAGGTCGGGAGCTGGCGTTTGTCTGTGGCAGCAGCTGGGTGGCGTGTAAAT  
 GACATCACTCCGAGGGCTTAGAGATCCTCCTGCCCTTTCGTGCTGTGCTCATGTCTGAGGAGCACACGG  
 CTGTGTACACAGCCTGGTACCTATTTGAACCCGTTGCCAAGGCCCTGGGCCCCAAAAATGCCAACAGTA  
 CCTCCTGAAGCCTCTCATCGTGCCTATGAGAGCCCCTGCCGCTGCATGGCCGCTTCTACCTGTACACC  
 GACTGTTTTGTGGCCAGTTGGTGGTGGGCTGGGCTGCAGGCCTTCTCACCCACTGCTGCCCATG  
 TCCTCCAGTACTGGCTGGGTGGAGGCTTCCAGGAGGAGGGCAAAGGCCTGGTCCGGACCACCTGAGGA  
 TGAGAAAAGTGAGCTCCCGTTCGGGCTCCAGGCTGCTGTGCTTTGGGAAGAGATTCAGATGGATGGG  
 CAGCCGCTGCTTCTCAGACTGGGGCTCCAGACTACAGGTGGGGCTCAGCTTCCATGACCAGGCCG  
 ACCTGCCGGACACGGAGGACTTCCAAGCTGGACTCTACGTGGTGAATCTCCACAGCCCCAGGAGCTGA  
 GGCCGTGAGCCTGGGCCAGCTGAGTGATAAGAGCAGTACCAGCGAAGCCTCCAGGGCGAGGAGAGGGGT  
 GGGGATGATGGCGGTGCCCTGCGGACAAGAACAGCGTCAAGTCAAGGGACAGCAGCCAGGACTTGAAGC  
 AGAGCGAAGGCTCTGAGGAAGAGGAGGAGGAGGAAGGCTGTGTGGTGTGGAGGAGACCAGGAGGATGA  
 AGTCACGGGAACATCCGAGCTCACTCTGTCTGACACGATGCTGTCCATGGAGACGGTGGTGGCTCCTGGT  
 GATGGGAGAGACAGAGAAGGAAGAGGAGCCGCTGACAGAGCAGACAGAAGGCAAAGAACAAAAGATCC  
 TCCTTGATACAGCCTGCAAGATGGTCCGCTGGCTGTCTGCCAAGCTTGGCCCCACAGTAGCCTCTGCCA  
 TGTGGCCCGAACCTGCTGCGCCTGCTGACATCTTGTATGTTGGGCCCACTCGACAGCAGTTACCCGTC  
 AGCAGTGATGACACCCCTCCACTGAATGCCGGCAACATCTACCAGAAGAGGCCAGTCTAGGTGACATCG  
 TGTCCGGGCTGTGCTCAGCTGCCTCCTCCACATTGCCTACCTGTATGGAGAACCCGTTCTCACCTACCA  
 GTACCTGCCCTACATCAGCTACCTGGTAGCCCCAGGGAGCAACTCAAACCCAGCCGACTGAACAGCCGC  
 AAGGAGGCCGGCTGCTGGCAGCGGTGACACTGACGCAGAAAAATCATCGTATACCTCTCTGACACGACCC  
 TCATGGACATTCTGCCCCGATTAGCCACGAGGTCTTGTGCTGTGCTGGCTTCTCACCTCCTTCGT  
 CACAGGTTCCCCAGTGGGGCCAGGCCCGACTGTCTATGCGTGAAAACCATCAGTCTCATCGCCCTC  
 ATCTGCTTGGCATCGGGCAGGAGATGGTCCAGCAGCCTGAGTGAGCCAGTGGCCACCTTCTTCCAAG  
 TCTTCTCATCTGCATGAGCTTCGGCAGCAGGATCTGCCACTGGATCCTAAGGGCTGTACTGAGGGCCA  
 GCTGCCAGAGGGACCTTCTCTGATGGGACGACGACCAAGTGGACCCCACTGCTGGAAGAGCTGCAG  
 AAGGTGTTACCCCTGGAATGGCGTACACAATCTACGTACCTTCTCCTGCCTGTTGGGTGACATCATCC  
 GGAAAATCATCCCAACCATGAGTTGGTGGGGAGCTGGCAGGGCTCTATCTGGAAGCATGAGCCCGAG  
 CTCTCGAAACCCAGCCAGCATGGAACCCACCATGGCTAGTGCCGGCCCTGAATGGGACCCCTCAGAGTGG  
 AGCTGTCTCCAGGACGATGGCCACTCAGGGACCTTTGGGAGTGTCTGGTTGGAATCGCATCCAGATCC  
 CTGACTCTCAGCCCAGAGTCTGGGCCACTGGGCTCCCTCTCTGGAGTGGGTAGTAGCGGAGGCCTCAG  
 CAACAGGAATGAAGACAACGCCCTGAAGCGGGAGCTGCCTCGGAGTGCCCATGGGCTGAGCGGAACTGG  
 CTGGCGTACTGGCAGTACGAGATCGGTGTGAGCCAGCAGGATGCCCACTTCCACTTCCACAGATCCGCC  
 TGCAGAGCTTCCAGGGCACACGGGGCCGTCAAATGCGTGGCCGCCCTGAGCAGTGAAGACTTCTTTCT  
 GAGTGGCAGCAAGGACCGGACTGTGCGCCTCTGGCCGCTGTACAACTATGGGGACGGGACCAATGAGACG  
 GCTTCCCCTCATCTATGCCAGCACCAGCAAAAGCGTCTTCTACGTGGGCCAGCTTGGGCCCCGAGT  
 ATGTGGTGGCTGTGATGGGGCAGTGCACGTCTGGGACCCCTTACAGGAAAGACCCCTTCGCACAGTGG

TCCTTCAGACAGCCGGGTGCCCTGACGGCTGTGGCTGTCATGCCTGCCCCACACACCAGCATCACCATG  
 GCCAGCTCCGACTCCACTCTGCGCTTTGTGGACTGCAGGAAGCCAGGCTTGCAGCATGAGTTCCGACTGG  
 GTGGAGGGCTGAACCCTGGGCTTGTTCGCTCGTTGGCCGTAGCCAGTGGCCGGAGTGTGTGGCTGG  
 CTTCTCCTCGGGCTTCATGGTGTCTAGATACCCGCACGGCCCTGGTTCTACGAGGCTGGCCAGCCCAT  
 GAAGGGGACATTCTACAGATCAAGGCTGTAGAGGGCAGCGTGTCTCATGACTCCTTCCGACCATTCTT  
 TGACTGTTTGAAGGAGCTGGAACAGAAGCCCACGCACCACTACAAGTCAGCGTCCGACCCAATCCACAC  
 CTTTGACCTGTACGGCAGCGAGGTGGTCACCGCACTGTAGCCAACAAGATTGGTGTCTGTTCCCTGCTT  
 GAGCCACCCTCTCAGGCCACCACAAAGCTCAGTTCCGAGAACTTCCGTGGCAGCTCACTAGTCTGGCTT  
 TGCTGCCACGAAACGCCACCTCTGCTGGGCTCGGACAATGGCATCATCCGCCTCTGGCATAG

AGCGGACCGACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
 TGGATTACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-RsrII
- ACCN:** NM\_138950
- Insert Size:** 5805 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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\\_138950.2](#), [NP\\_620400.2](#)
- RefSeq Size:** 6976 bp
- RefSeq ORF:** 5805 bp
- Locus ID:** 192652
- UniProt ID:** [Q5ND34](#)
- Cytogenetics:** 11 B5

**Gene Summary:**

Functions as a negative regulator of the PI3 kinase/PI3K activity associated with endosomal membranes via BECN1, a core subunit of the PI3K complex. By modifying the phosphatidylinositol 3-phosphate/PtdInsP3 content of endosomal membranes may regulate endosome fusion, recycling, sorting and early to late endosome transport. It is for instance, required for the delivery of cargos like BST2/tetherin from early to late endosome and thereby participates indirectly to their degradation by the lysosome. May also play a role in aggrephagy, the macroautophagic degradation of ubiquitinated protein aggregates. In this process, may regulate the interaction of SQSTM1 with ubiquitinated proteins and also recruit MAP1LC3C (By similarity). May also be involved in maintenance of normal mitochondrial structure and organization (PubMed:23595742).[UniProtKB/Swiss-Prot Function]