

## Product datasheet for **MG216903**

### Washc4 (NM\_001033375) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Washc4 (NM\_001033375) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Washc4  
**Synonyms:** A230046K03Rik; AA589518; Kiaa1033; mKIAA1033  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG216903 representing NM\_001033375  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCGTGGACACTCTGTCGCCCGACTGGGACTTCGACCGCGTGGACGACGGCTCTCAGAAAATTCATG  
CTGAAGTCCAGCTGAAGAACTACGGGAGGTTCTTGAGGAGTACACATCTCAGCTGAGAAGAATTGAGGA  
CGCCCTAGATGATTTGATTGGCGATGTTGGGATTTCAATCTTGATCCTATAGCATTAAAGCTTCTGCC  
TATGAGCAGTCTCCCTTTGGAACTCATAAAGACTGAAAACAAGGTCTGAACAAAGTCATCACTGTTT  
ATGCGGCACTTTGTTGCGAGATCAAGAAATTTAAATATGAGGCAGAACTAAGTTTTACAATGGTCTTCT  
GTTTTATGGTGAAGGAGCTACAGATTCCAGCATGGTGAAGGTGACTGCCAAATTCAAATGGGGAGATTC  
GTTTCATTCTTACAGAACTGTCCTGCTTTGTGACGAGGTGCTACGAAGTGGTGAATGTCATCCACC  
AGCTGGCTGCCCTGTACATCAGCAACAAGATAGGACCCAAAATATAGAGACAACCTGGAGTTCATTTTCA  
GACTATGTATGAGCACTGGGAGAAGTCTAACAGTTTTACTTACCCTGGATGAGATTGTTGATAATCAT  
GTCACGCTGAAAGACCACTGGACTATGTACAAAAGGTTGCTGAAATCTGTCCATCACAACCTTCAAAT  
TTGGGATTCAGGAAGAAAAGTTAAAGCCCTTTGAGAAGTCTTGTCTGAAGCTGGAAGGCGAGTACTTGA  
TGAATGATATTCAGGCCTGTATCGAACAGCAGTTTGATTCTCTCAATGGAGGAATATCTGTGTCGAAA  
AATAGCACGTTTGCAGAAGAGTTTGCACATAGCATTGCTCAATTTTTGCAAATGTGGAAGCAAGCTTG  
GTGAGCCTTCTGAAATTGACCAGAGAGACAAGTATGTTGGAATTTGTGGGCTCTTGTACTGCACCTTCA  
GATTTTTCGGACTGTTGATAAAAAGTTTTATAAGTCTTTATTGGACATTTGTAAGAAGGTGCCAGCCATC  
ACTTTAACTGCTAATATTTGGTTTCTGATAATTTCTGATTCATAAAAATGCCAGCAGCTGCCAAAC  
TTCTAGACAGAAAAGTCTTCAAGCCATTTAAATACACAGGGATACCTTCTACAGCAGAAAAGCTCAGTC  
ACTTAACAAAGATGTGCAGTCTTACTACGCTTTGTGAGCTCATGGATGATGAAGATGGAGTCTATGTTA  
TCTAAAGAGCAGAGGATGGATACATTTGCTGAAGACCTCACCAACAGATGCAATGTTTTTCATACAGGTT  
TCTTATATGCATATAGTATTAGTACCATTATTAAGACCACAATGAATCTCTACATGTCCATGCAGAAGCC  
TATGACAAAACCTCAGTGAAGCATTATGCAGGCTCATTGAACCTCTCAAGGCAATAGAGCATATGTTCC



[View online >](#)

TACAGGAGAAGCATGGTTGTGGCGGATTCGGTGTACATATAACACAGCACCTTCAACATCAGGCTCTTA  
GTTCTATTTCTGTAGCCAAGAAAAGAGTAATTTTCAGACAAAAATATAGTGAACAGCGTCTTGATGTGCT  
ATCTGCTCTTGTGGCTGAAAACACCTTAAATGGACCAAGCACAAAACAACGACGACTTATTGTTCT  
TTGGCATTGAGCGTTGGCAGCGAAATGAAAACATTTAAAGATGAAGAAGCTTTCCCTTCAAGTAGTCA  
TGAAGAAGCTGGATCTTATCAGCGAGCTTAGAGAGCGAGTCCAAGCACAGTGTGACTGCTGTTTTATA  
CTGGCATCGCGCTGTCTCCCGATTTATTTAGATGATGTATATGAAAATGCTGTGATGCCAGCCAGTAA  
CATTACATGTTTCAGTGCCTTACGAGACTGTGTGCCTGCCATGATGCATTCAAGGCATTTAGAGTCCCATG  
AGCTGCTTTTGGATTGCTATGACAAGGAAATCATGGACATTTTAAATGAGCATTGCTGGATAAGCTGTG  
TAAGGAGATCGAGAAGGACTTGGCGCTTTCTGTGCATACTCACTTGAAGCTGGATGACCGGAACCCCTT  
AAAGTTGGCAGGAAAGACTTGGCGCTCTTTTTCTCTGAAACCCTATTCGGTTTTTCAATCGATTATTG  
ATATTCGAGCTTATGTAACCTACTATCTGGATAAGACTTCTACAATCTCACAACAGTAGCTCTTCATGA  
TTGGGCCACTTACAGTGAATGAGAAATCTGGCTACGCAGCGTTATGGTTTGGTTATGACAGAGGCACAT  
CTTCTAGCCAGACTTTGGAGCAGGACTCGATGCTGCTGAAATATGAGAAACATTACATATTTGTCT  
CAAGATACCTCTATAATCTCAATAACCAGATTTTTATTGAACGGACAAGCAACAATAAACATTTGAATC  
TATTAATATTCGACACATTGCTAATTCGATTGCAACACATGGGACGGGGATCATGAATACAACAGTTAAT  
TTCACGTACCAGTTTTTAAAAAGAAGTTCTATATATTTAGTCAGTTTATGTATGATGAGCATATCAAA  
CCAGATTGATTAAGATATTCGGTTTTTTCAGGGAGATCAAGGACCAAAATGACCACAAGTATCCTTTTGA  
TAGAGCAGAAAAATTCATCGTGGCATAAGAAAATTTGGAATCACACCAGAGGGACAGAGCTACCTTGAC  
CAGTTCAGGCAGCTCATCAGCCAGATTGGTAATGCTATGGGCTATATACGCATGATAAGATCTGGTGGTC  
TTCATTGTAGCAGCAATGCCATTAGATTCGTGCCGGATCTTGAAGACATTGTGAGTTTTGAAGAGCTCGT  
GAAAGAAGAAGGGCTTGCAGAAGAACTTAGAGCAGCCAGGCATTTGGACTCAGTCTCAGTGATCAT  
ACACGGAACTCTGCTGAAGGTACAGAATATTTCAAATGCTTGTAGATTTTTGCTCCAGAATTTGAA  
GGCCAAAGAATATACATCTCCGAAATTTCTATATCATTGTTCTCCTCTTACTCTGAACTTTGTAGAACA  
TTCTATAAGTTGCAAAGAGAAGTTGAATAAAAAAATAAACTAGGAGCTGCATTTACTGACGATGGTTTT  
GCCATGGGTGGCTTATACCTTAAAGCTTTTGGATCAGTACCAAGAGTTTGATTCACTTCATTGTTCC  
AGTCTGTAGAGAAAAATACATAAAGGAGATCAGAGCAGTTGCTAAGCAACAGAACGTGCAGTCAACTAG  
TCAAGATGAAAACTACTCCAACCATGAACCTTACTCAGAAGCGACTGGAGGTCTATTTACAGGAATTT  
GAGCTGCTGATTTCTCCTTGGCAGTGAAGAATATTCTTCAGAGCAGACAAGACCGCAGCTGAAGAGA  
ACCAAGAAAAGAAAGAGAAGGAAGAAGAACTAAAACAAGCAATGGAGATGGACCCGAGAGCACTGTGTC  
TGCAGATCCCGTGGTAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG216903 representing NM\_001033375  
 Red=Cloning site Green=Tags(s)

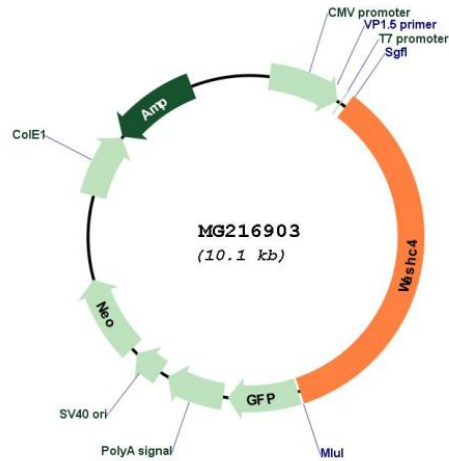
MAVDTLSPDWDFDRVDDGSQKIHAEVQLKNYGRFLEEYTSQLRRIEDALDDLIGDVWDFNLDPIALKLLP  
 YEQSSLLELIK TENKVLNKVITVYAALCCEIKKLKYEATKFNGLLFYEGEGATDSSMVEGDCQIQMGRF  
 VSFLQELSCFVTRCYEVVMNVIHQLAALYISNKIGPKIETTGVHFQTMYEHLGELLTVLLTLDEIVDNH  
 VTLKDHWTMYKRLLKSVHHNPSKFGIQEEKLPFEKFLKLEGQLLDGMIFQACIEQQFDSLNGGIVSVK  
 NSTFAEEFAHSIRSIFANVEAKLGEPEIDQRDKYVVICGLFVLHFQIFRTVDKKFYKSLLDICKKVP  
 TLTANIWFDPNFLIHKMPAAAKLLDRKSLQAIKIHRTFLQKKAQSLNKDVQSYVYFVSSWMMKMSML  
 SKEQRMDFAEHLTNR CNVFIQGFLYAYSISTIIKTTMNL YMSMQPMTKTSVKALCRLIELLKAIEHMF  
 YRRSMVADSVSHITQHLQHQLSSISVAKKRVISDKKYSEQRLDVL SALVLAENTLNGPSTKQRRLLIVS  
 LALSVGTQMKTFKDEELFPLQVVMKKLDLISELRERVQAQCDCFLYWHRAVFP IYLLDDVYENAVDAARL  
 HYMF SALRDCVPAMMHSRHLESHELLLDCYDKEIMDILNEHLLDKLCKEIEKDLRLSVHHLKLDNRNPF  
 KVGKRDALFFSLNPIRFFNR FIDIRAYVTHYLDKTFYNLTTVALHDWATYSEMRNLATQRYGLVMTEAH  
 LPSQTLQGLDVLEIMRNIHIFVSRYLYNLNNQIFIERTSNNKHLNTINIRHIANSIRTHGTGIMNTTVN  
 FTYQFLKKFYIFSQFM YDEHIKSRLIKDIRFFREIKDQNDHKYPFDRAEKFNRGIRKLGITPEGQSYLD  
 QFRQLISQIGNAMGYIRMIRSGGLHCSSNAIRVDPLEIVSFEELVKEGLAEETLRAARHLDSVLS DH  
 TRNSAEGTEYFKMLVDVFAPEFRPKNIHLRNFYIIVPPLTLNFVEHSISCKEKLNKNKLGAFTDDGF  
 AMGVAITLKLDDQYQEFDSLHWFQSVREKYIKEIRAVAKQNVQSTSQDEKLLQTMNLTKRLEVYLQEF  
 ELLYFSLSSARIFFRADK TAAEENQEKEKEEETKTSNGDGPESTVSADPVVK

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI  
 Cloning Scheme:



## Plasmid Map:



ACCN: NM\_001033375

ORF Size: 3519 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\\_001033375.2](#), [NP\\_001028547.2](#)

RefSeq Size: 5863 bp

RefSeq ORF: 3522 bp

Locus ID: 319277

UniProt ID: [Q3UMB9](#)

Cytogenetics: 10 C1

**Gene Summary:**

Acts at least in part as component of the WASH core complex whose assembly at the surface of endosomes seems to inhibit WASH nucleation-promoting factor (NPF) activity in recruiting and activating the Arp2/3 complex to induce actin polymerization, and which is involved in regulation of the fission of tubules that serve as transport intermediates during endosome sorting (PubMed:19922875).[UniProtKB/Swiss-Prot Function]