

Product datasheet for **SC324033**

WASHC1 (NM_182905) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: WASHC1 (NM_182905) Human Untagged Clone
Tag: Tag Free
Symbol: WASHC1
Synonyms: FAM39E; WASH; WASH1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC (PS100020)
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_182905.1
GCTCCTTGCTGCTCTTCAACACCCAGACCTGTAGAAGAAGTATGTCTTCTGGACC
CCCTGGCTGGTGTGTAACAAAGACCCATGTGATGCTGGGGGAGAGACAGAGGAGAAGC
TGTTTGTGCCCCCTTGTCCATCAGCAAGAGAGAGCAGCTGGAACAGCAGGTCCCAGAGA
ACTACTTCTATGTGCCAGACCTGGGCCAGGTGCCTGAGATTGATGTTCCATCCTACCTGC
CTGACCTGCCAGCATTGCCAACGACCTCATGTACATTGCCGACCTGGGCCCGGCATTG
CCCCCTGCCCCCTGGCACCATTCAGAAGTCCCACTGCCACCTTCCACACTGAGGTAGCCGAGC
CTCTCAAGGCAGACCTACAAGATGGGGTACTAACACCACCCCAACCGCCCCACCCAC
CCCCAGCTCCTGAGGTGCTGGCCAGTGCACCCCACTCCCACCCTCAACCGGGCCCTG
TAGGCCAAGGCGCCAGGCAGGACGACAGCAGCAGCAGCAGTCTCCTCAGTCCAGGGAG
CTCCCAGGGAAGTGGTCGACCCCTCCAGTGGCTGGGCCACTCTGCTAGAGTCCATCCGCC
AAGCTGGGGGATCGGCAAGGCCAAGCTGCGCAGCATGAAGGAGCGAAAGCTGGAGAAGA
AGAAGCAGAAGGAGCAGGAGCAAGTGAAGGCCACGAGCCAAGGTGGGCACTTGATGTCGG
ATCTCTTCAACAAGCTGGTTCATGAGGCGCAAGGGCATCTCTGGGAAAGGACCTGGGGCTG
GTGAGGGGCGGAGGAGCCTTTGCCCGGTGTCAGACTCCATCCCTCCTCTGCCGCCAC
CGCAGCAGCCACAGGTAGATGAGGACAAGGACGACTGGGAATCCTAGGGGGCTCCATGAC
ACCTTCCCCCGCAGACCCAGACTTGGGCCGTTGCTCTGACATGGACACAGCCAGGACAAG
CTGCTCAGACCTGCTTCCCTGGGAGGGGTGACGGAACCAGCACTGTGTGGAGACCAGCT
TCAAGGAGCGGAAGGCTGGCTTGGGCCACACAGCTGGGGCGGGGACTTGTCTGCCTG
TGCTCCATGGGGGACGGCTCCACCCAGCCTGTGCCACTGTGTTCTTAAGAGGCTTCCAG
AGAAAACGGCACACCAATCAATAAAGAACTGAGCAGAAACCAACAGTGTGCTTTAATAA
AGGACCTTAGCTGTGCAGGAAAAAAAAAAAAAAAAAAAA

Restriction Sites: ECoRI-NOT
ACCN: NM_182905



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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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<ol style="list-style-type: none"> 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:	<u>NM_182905.1</u> , <u>NP_878908.1</u>
RefSeq Size:	795 bp
RefSeq ORF:	795 bp
Locus ID:	100287171
UniProt ID:	<u>A8K0Z3</u>
Cytogenetics:	9p24.3

Gene Summary:

Acts as a nucleation-promoting factor (NPF) at the surface of endosomes, where it recruits and activates the Arp2/3 complex to induce actin polymerization, playing a key role in the fission of tubules that serve as transport intermediates during endosome sorting (PubMed:19922874, PubMed:19922875, PubMed:20498093, PubMed:23452853). Its assembly in the WASH core complex seems to inhibit its NPF activity and via WASHC2 is required for its membrane targeting (PubMed:20498093). Involved in endocytic trafficking of EGF (By similarity). Involved in transferrin receptor recycling. Regulates the trafficking of endosomal alpha5beta1 integrin to the plasma membrane and involved in invasive cell migration (PubMed:22114305). In T-cells involved in endosome-to-membrane recycling of receptors including T-cell receptor (TCR), CD28 and ITGAL; proposed to be implicated in T cell proliferation and effector function. In dendritic cells involved in endosome-to-membrane recycling of major histocompatibility complex (MHC) class II probably involving retromer and subsequently allowing antigen sampling, loading and presentation during T-cell activation (By similarity). Involved in Arp2/3 complex-dependent actin assembly driving Salmonella typhimurium invasion independent of ruffling. Involved in the exocytosis of MMP14 leading to matrix remodeling during invasive migration and implicating late endosome-to-plasma membrane tubular connections and cooperation with the exocyst complex (PubMed:24344185). Involved in negative regulation of autophagy independently from its role in endosomal sorting by inhibiting BECN1 ubiquitination to inactivate PIK3C3/Vps34 activity (By similarity).[UniProtKB/Swiss-Prot Function]