

Product datasheet for **SC329331**

FAM21C (WASHC2C) (NM_001169106) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FAM21C (WASHC2C) (NM_001169106) Human Untagged Clone
Tag:	Tag Free
Symbol:	WASHC2C
Synonyms:	FAM21A; FAM21C; VPEF
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001169106, the custom clone sequence may differ by one or more nucleotides

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ATGATGAACCGGACGACCCCGACCAGGAGCTGGTGCCGCGCTCGGAGCCCGTGTGGGAG
CGGCCGTGGTCCGTGGAGGAGATCCGCAGGAGCAGCCAGAGCTGGTGCCTGGCGGCCGAC
GCGGGCCTACTACAGTTTCTACAGGAATTCTCACAGCAAATCTCTAGGACCCATGAA
ATCAAGAAACAAGTGGACGGACTAATCCGGGAAACCAAAGCCACAGATTGTCGCCTGCAT
AATGTCTTCAATGACTTCCTTATGCTCTCTAATACCCAGTTCATAGAGAATCGTGTATAT
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TTACAAGTATTGGACAGTGCCTTTGAGCAACTTGATATCAAAGCAGGAAACTCAGACTCC
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CCTAAAAGAAGCAGACCTACATCGTTTGCAGATGAGCTGGCTGCCCGCATCAAGGGGGAT
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GACTTTTTCTCGGCACCCACAGCAAACCTTCTAAAACACGCAAAGTCCAATCCACTGCC
GATATCTTTGGTGACGAAGAAGGAGATCTGTTCAAAGAAAAGCCGTAGCATCGCCAGAA

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GCCACTGTGAGTCAGACAGATGAAAATAAAGCAAGAGCAGAAAAAAGGTTACCTTATCT
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AAGACCAGTCTCTTTGAGGAAGACAAAGAAGATGATCTTTTTGCCATTGCCAAGGACAGC
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CGTGACAGTAGGCGGCTGGCTGCTCAGGAGTCCAGCGAGGCTGAGGACATGAGCGTCCCC
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TGGGAAGGTGGTCTGTGCTGGAGTGGACACAAGCCCCTTTGCAAAGTCTCTGGGTCAT
TCCAGAGGGGAGGCTGACCTTTTTGATTCTGGGGACATTTTTTCCACGGGCACTGGATCT
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TTTGATGATAACATTGATATCTTTGCTGACTTAACTGTAAAACCAAAAAGAAAAGTCCAAA
AAGAAAGTGAAGCCAAGTCTATATTTGATGATGATATGGATGACATCTTCTCCACTGGT
ATCCAGGCTAAGACAACCAACCAAAAAAGCCGATCTGCACAGGCCGCACCTGAACCAAGA
TTTGAACACAAGGTGTCCAACATCTTTGATGATCCCCTGAATGCCTTTGGAGGCCAGTAG
    
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Restriction Sites:

Please inquire

ACCN:

NM_001169106

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_001169106.1, NP_001162577.1</u>
RefSeq Size:	4531 bp
RefSeq ORF:	3840 bp
Locus ID:	253725
UniProt ID:	<u>Q9Y4E1</u>
Cytogenetics:	10q11.22
Gene Summary:	<p>Acts at least in part as component of the WASH core complex whose assembly at the surface of endosomes inhibits WASH nucleation-promoting factor (NPF) activity in recruiting and activating the Arp2/3 complex to induce actin polymerization and is involved in the fission of tubules that serve as transport intermediates during endosome sorting. Mediates the recruitment of the WASH core complex to endosome membranes via binding to phospholipids and VPS35 of the retromer CSC. Mediates the recruitment of the F-actin-capping protein dimer to the WASH core complex probably promoting localized F-actin polymerization needed for vesicle scission (PubMed:19922874, PubMed:20498093, PubMed:22513087, PubMed:23331060). Via its C-terminus binds various phospholipids, most strongly phosphatidylinositol 4-phosphate (PtdIns-(4)P), phosphatidylinositol 5-phosphate (PtdIns-(5)P) and phosphatidylinositol 3,5-bisphosphate (PtdIns-(3,5)P2). Involved in the endosome-to-plasma membrane trafficking and recycling of SNX27-retromer-dependent cargo proteins, such as GLUT1 (PubMed:25278552). Required for the association of DNAJC13, ENTR1, ANKRD50 with retromer CSC subunit VPS35 (PubMed:24980502). Required for the endosomal recruitment of CCC and retriever complexes subunits COMMD1 and CCDC93 as well as the retrievere complex subunit VPS35L (PubMed:25355947, PubMed:28892079). [UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) lacks an alternate in-frame exon in the 3' coding region, compared to variant 1, resulting in an isoform (2) that is shorter than isoform 1.</p>