

## Product datasheet for RC230693L3V

## OriGene Technologies, Inc.

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## FAM21C (WASHC2C) (NM 001169106) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** FAM21C (WASHC2C) (NM\_001169106) Human Tagged ORF Clone Lentiviral Particle

Symbol: FAM21C

Synonyms: FAM21A; FAM21C; VPEF

**Mammalian Cell** 

Selection:

Puromycin

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Tag: Myc-DDK

**ACCN:** NM\_001169106

ORF Size: 3837 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC230693).

OTI Disclaimer:

Sequence:

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.

RefSeq: <u>NM 001169106.1</u>

 RefSeq ORF:
 3840 bp

 Locus ID:
 253725

 UniProt ID:
 Q9Y4E1

 Cytogenetics:
 10q11.22

 MW:
 140.6 kDa





## **Gene Summary:**

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-actincapping 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 (Ptdlns-(4)P), phosphatidylinositol 5-phosphate (Ptdlns-(5)P) and phosphatidylinositol 3,5-bisphosphate (Ptdlns-(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]