

## Product datasheet for RC221766L4V

## OriGene Technologies, Inc.

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## EIF3A (NM\_003750) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

Product Type: Lentiviral Particles

**Product Name:** EIF3A (NM\_003750) Human Tagged ORF Clone Lentiviral Particle

Symbol: EIF3A

**Synonyms:** EIF3; eIF3-p170; eIF3-theta; EIF3S10; P167; p180; p185; TIF32

**Mammalian Cell** 

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_003750 **ORF Size:** 4146 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC221766).

Sequence:

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.

**RefSeq:** <u>NM 003750.1</u>, <u>NP 003741.1</u>

 RefSeq Size:
 5256 bp

 RefSeq ORF:
 4149 bp

 Locus ID:
 8661

 UniProt ID:
 Q14152

Cytogenetics: 10q26.11

**Domains:** PCI

MW: 166.4 kDa







## **Gene Summary:**

RNA-binding component of the eukaryotic translation initiation factor 3 (eIF-3) complex, which is required for several steps in the initiation of protein synthesis (PubMed:17581632, PubMed:25849773). The eIF-3 complex associates with the 40S ribosome and facilitates the recruitment of eIF-1, eIF-1A, eIF-2:GTP:methionyl-tRNAi and eIF-5 to form the 43S pre-initiation complex (43S PIC). The eIF-3 complex stimulates mRNA recruitment to the 43S PIC and scanning of the mRNA for AUG recognition. The eIF-3 complex is also required for disassembly and recycling of post-termination ribosomal complexes and subsequently prevents premature joining of the 40S and 60S ribosomal subunits prior to initiation (PubMed:17581632, PubMed:11169732). The eIF-3 complex specifically targets and initiates translation of a subset of mRNAs involved in cell proliferation, including cell cycling, differentiation and apoptosis, and uses different modes of RNA stem-loop binding to exert either translational activation or repression (PubMed:25849773, PubMed:27462815). [UniProtKB/Swiss-Prot Function]