

### Product datasheet for RC221385L4V

#### OriGene Technologies, Inc.

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## IREB2 (NM\_004136) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

Product Name: IREB2 (NM 004136) Human Tagged ORF Clone Lentiviral Particle

Symbol: IREB2

Synonyms: ACO3; IRE-BP 2; IRE-BP2; IRP2AD; NDCAMA

**Mammalian Cell** 

Selection:

Puromycin

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

Tag: mGFP

**ACCN:** NM\_004136 **ORF Size:** 2889 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC221385).

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 004136.1</u>

 RefSeq Size:
 3928 bp

 RefSeq ORF:
 2892 bp

 Locus ID:
 3658

 UniProt ID:
 P48200

 Cytogenetics:
 15q25.1

**Protein Families:** Druggable Genome

MW: 104.9 kDa

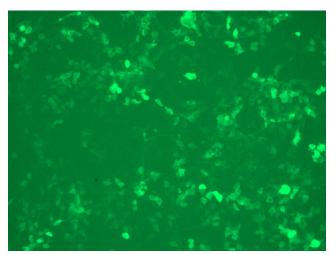




#### **Gene Summary:**

The protein encoded by this gene is an RNA-binding protein that acts to regulate iron levels in the cells by regulating the translation and stability of mRNAs that affect iron homeostasis under conditions when iron is depleted. When iron levels are low, this protein binds to iron-responsive elements (IRES), stem-loop structures located either in the 5' or 3' UTRs. Binding to the 5' UTR represses translation, while binding to the 3' UTR inhibits mRNA degradation. When iron is found in the cell, this protein is degraded in a F-box and leucine rich repeat protein 5-dependent manner. Variants in this gene have been associated with lung cancer and chronic obstructive pulmonary disease (COPD). Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Aug 2017]

# **Product images:**



[RC221385L4] was used to prepare Lentiviral particles using [TR30037] packaging kit. HEK293T cells were transduced with RC221385L4V particle to overexpress human IREB2-mGFP fusion protein.