

### Product datasheet for RC222253L1V

## OriGene Technologies, Inc.

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# CIITA (NM\_000246) Human Tagged ORF Clone Lentiviral Particle

### **Product data:**

Product Type: Lentiviral Particles

**Product Name:** CIITA (NM\_000246) Human Tagged ORF Clone Lentiviral Particle

Symbol: CIITA

Synonyms: C2TA; CIITAIV; MHC2TA; NLRA

**Mammalian Cell** 

Selection:

None

**Vector:** pLenti-C-Myc-DDK (PS100064)

Tag: Myc-DDK
ACCN: NM\_000246

ORF Size: 3390 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC222253).

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.

**RefSeg:** NM 000246.2

 RefSeq Size:
 4661 bp

 RefSeq ORF:
 3393 bp

 Locus ID:
 4261

 UniProt ID:
 P33076

 Cytogenetics:
 16p13.13

**Protein Pathways:** Antigen processing and presentation, Primary immunodeficiency

MW: 123.2 kDa







### **Gene Summary:**

This gene encodes a protein with an acidic transcriptional activation domain, 4 LRRs (leucine-rich repeats) and a GTP binding domain. The protein is located in the nucleus and acts as a positive regulator of class II major histocompatibility complex gene transcription, and is referred to as the "master control factor" for the expression of these genes. The protein also binds GTP and uses GTP binding to facilitate its own transport into the nucleus. Once in the nucleus it does not bind DNA but rather uses an intrinsic acetyltransferase (AT) activity to act in a coactivator-like fashion. Mutations in this gene have been associated with bare lymphocyte syndrome type II (also known as hereditary MHC class II deficiency or HLA class II-deficient combined immunodeficiency), increased susceptibility to rheumatoid arthritis, multiple sclerosis, and possibly myocardial infarction. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2013]