

## **Product datasheet for RG238840**

### CIITA (NM\_001286403) Human Tagged ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** CIITA (NM\_001286403) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: CIITA

Synonyms: C2TA; CIITAIV; MHC2TA; NLRA

Mammalian Cell Neomycin

Selection:

**Vector:** pCMV6-AC-GFP (PS100010)

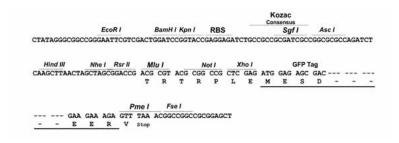
E. coli Selection: Ampicillin (100 ug/mL)

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 

Cloning sites used for ORF Shuttling:





**ACCN:** NM\_001286403

ORF Size: 1638 bp



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#### CIITA (NM\_001286403) Human Tagged ORF Clone - RG238840

**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.

**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).

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

**RefSeq:** <u>NM 001286403.2</u>

 RefSeq Size:
 2902 bp

 RefSeq ORF:
 1641 bp

 Locus ID:
 4261

 UniProt ID:
 P33076

 Cytogenetics:
 16p13.13

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

**MW:** 60.1 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

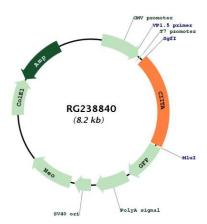
in a coactivator-like fashion. Mutations in this gene have been associated with bare

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]



# **Product images:**



Circular map for RG238840