

Anti-CIITA (RABBIT) Antibody
CIITA Antibody
Catalog # ASR4382

Specification

Anti-CIITA (RABBIT) Antibody - Product Information

| | |
|------------------|---|
| Host | Rabbit |
| Conjugate | Unconjugated |
| Target Species | Human |
| Reactivity | Human |
| Clonality | Polyclonal |
| Application | WB, E, I, LCI |
| Application Note | Anti-CIITA is suitable for the detection by immunoblot of human CIITA and ELISA. |
| Physical State | Liquid (sterile filtered) |
| Buffer | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| Immunogen | Anti-CIITA was produced by repeated immunizations with CIITA peptide corresponding to a region near the N-terminus of the human protein conjugated to Keyhole Limpet Hemocyanin (KLH). |
| Preservative | 0.01% (w/v) Sodium Azide |

Anti-CIITA (RABBIT) Antibody - Additional Information

Gene ID 4261

Other Names
4261

Purity

Anti-CIITA antibody is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum as well as purified and partially purified CIITA [Human]. Cross reactivity against CIITA from other species may occur but have not been specifically determined.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-CIITA (RABBIT) Antibody - Protein Information

Name CIITA ([HGNC:7067](#))

Synonyms MHC2TA

Function

Essential for transcriptional activity of the HLA class II promoter; activation is via the proximal promoter (PubMed: [16600381](http://www.uniprot.org/citations/16600381) target="_blank">16600381, PubMed: [17493635](http://www.uniprot.org/citations/17493635) target="_blank">17493635, PubMed: [7749984](http://www.uniprot.org/citations/7749984) target="_blank">7749984, PubMed: [8402893](http://www.uniprot.org/citations/8402893) target="_blank">8402893). Does not bind DNA (PubMed: [16600381](http://www.uniprot.org/citations/16600381) target="_blank">16600381, PubMed: [17493635](http://www.uniprot.org/citations/17493635) target="_blank">17493635, PubMed: [7749984](http://www.uniprot.org/citations/7749984) target="_blank">7749984, PubMed: [8402893](http://www.uniprot.org/citations/8402893) target="_blank">8402893). May act in a coactivator-like fashion through protein-protein interactions by contacting factors binding to the proximal MHC class II promoter, to elements of the transcription machinery, or both PubMed: [8402893](http://www.uniprot.org/citations/8402893) target="_blank">8402893, PubMed: [7749984](http://www.uniprot.org/citations/7749984) target="_blank">7749984, (PubMed: [16600381](http://www.uniprot.org/citations/16600381) target="_blank">16600381, PubMed: [17493635](http://www.uniprot.org/citations/17493635) target="_blank">17493635). Alternatively it may activate HLA class II transcription by modifying proteins that bind to the MHC class II promoter (PubMed: [16600381](http://www.uniprot.org/citations/16600381) target="_blank">16600381, PubMed: [17493635](http://www.uniprot.org/citations/17493635) target="_blank">17493635, PubMed: [7749984](http://www.uniprot.org/citations/7749984) target="_blank">7749984, PubMed: [8402893](http://www.uniprot.org/citations/8402893) target="_blank">8402893). Also mediates enhanced MHC class I transcription; the promoter element requirements for CIITA-mediated transcription are distinct from those of constitutive MHC class I transcription, and CIITA can functionally replace TAF1 at these genes. Activates CD74 transcription (PubMed: [32855215](http://www.uniprot.org/citations/32855215) target="_blank">32855215). Exhibits intrinsic GTP-stimulated acetyltransferase activity (PubMed: [11172716](http://www.uniprot.org/citations/11172716) target="_blank">11172716). Exhibits serine/threonine protein kinase activity: can phosphorylate the TFIID component TAF7, the RAP74 subunit of the general transcription factor TFIIF, histone H2B at 'Ser-37' and other histones (in vitro) (PubMed: [24036077](http://www.uniprot.org/citations/24036077) target="_blank">24036077). Has antiviral activity against Ebola virus and coronaviruses, including SARS-CoV-2 (PubMed: [32855215](http://www.uniprot.org/citations/32855215) target="_blank">32855215). Induces resistance by up-regulation of the p41 isoform of CD74, which blocks cathepsin-mediated cleavage of viral glycoproteins, thereby preventing viral fusion (PubMed: [32855215](http://www.uniprot.org/citations/32855215) target="_blank">32855215).

Cellular Location

Nucleus. Nucleus, PML body. Note=Recruited to PML body by PML

Anti-CIITA (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)

- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-CIITA (RABBIT) Antibody - Images

Anti-CIITA (RABBIT) Antibody - Background

Anti-CIITA antibody detects CIITA. The transactivator CIITA regulates basal and interferon-induced expression of Major Histocompatibility Complex class II genes. CIITA restores expression of all MHC class II gene expression in mutant cells and corrects regulatory defects of MHC class II genes. Antibodies to this transactivator are useful in the study of diseases of pathological MHC class II expression. Antigen can be obtained from Raji cell lysates. Typically levels of CIITA expression are too low to detect endogenous levels of protein expression. Transiently transfected cells are usually employed to study this transcription factor.