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CIITA Antibody (N-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS14120

Specification

CIITA Antibody (N-Terminus) - Product Information

Application	**IF, WB, IHC**
Primary Accession	P33076
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**124kDa KDa**

CIITA Antibody (N-Terminus) - Additional Information

Gene ID 4261

Other Names
MHC class II transactivator, CIITA, 2.3.1.-, 2.7.11.1, CIITA, MHC2TA

Target/Specificity
Human CIITA

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions
CIITA Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

CIITA Antibody (N-Terminus) - 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, PubMed:17493635, PubMed:7749984, PubMed:8402893). Does not bind DNA (PubMed:16600381, PubMed:17493635, PubMed:7749984, PubMed: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, PubMed:7749984, (PubMed:16600381, PubMed:17493635). Alternatively it may activate HLA class II transcription by modifying proteins that bind to the MHC class II promoter (PubMed:16600381, PubMed:17493635, PubMed:7749984, PubMed: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). Exhibits intrinsic GTP- stimulated acetyltransferase activity (PubMed: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). Has antiviral activity against Ebola virus and coronaviruses, including SARS-CoV-2 (PubMed: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).

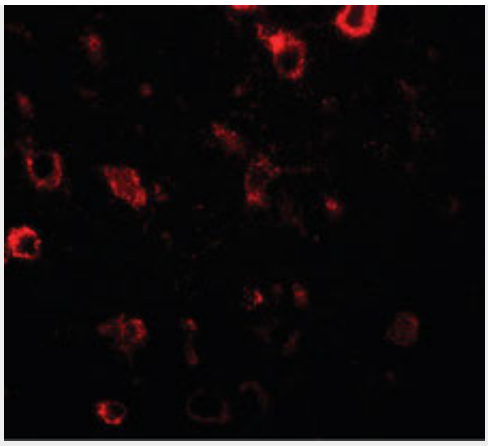
Cellular Location
Nucleus. Nucleus, PML body. Note=Recruited to PML body by PML

CIITA Antibody (N-Terminus) - Protocols

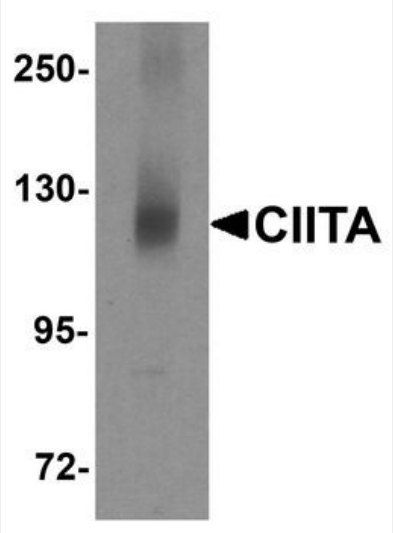
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

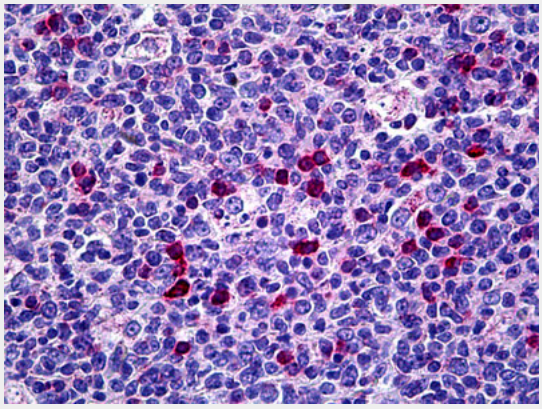
CIITA Antibody (N-Terminus) - Images



Immunofluorescence of CIITA in human brain tissue with CIITA antibody at 20 ug/ml.



Western blot analysis of CIITA in mouse brain tissue lysate with CIITA antibody at 1 ug/ml.



Anti-CIITA antibody IHC of human tonsil.

CIITA Antibody (N-Terminus) - Background

Essential for transcriptional activity of the HLA class II promoter; activation is via the proximal promoter. No DNA binding of in vitro translated CIITA was detected. 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. Alternatively it may activate HLA class II transcription by modifying proteins that bind to the MHC class II promoter. 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. Exhibits intrinsic GTP-stimulated acetyltransferase activity. 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).

CIITA Antibody (N-Terminus) - References

Steimle V.,et al.Cell 75:135-146(1993).
Riley J.L.,et al.Immunity 2:533-543(1995).
Quinn G.,et al.Eur. J. Immunogenet. 30:259-270(2003).
Day N.E.,et al.Leuk. Res. 27:1027-1038(2003).
Livingston R.J.,et al.Submitted (OCT-2006) to the EMBL/GenBank/DDBJ databases.