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Anti-CIITA Picoband Antibody
Catalog # ABO12681

Specification

Anti-CIITA Picoband Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P33076
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for MHC class II transactivator(CIITA) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CIITA Picoband Antibody - Additional Information

Gene ID 4261

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

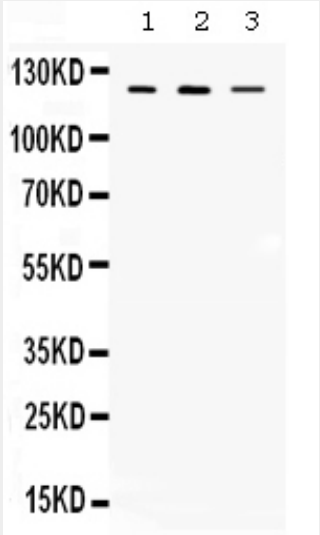
Calculated MW
sc 9869|sc 48797|sc 9868|sc 13556|sc 9870|sc 9867|sc 376174|sc 48797 X|sc 9870 X|sc 9869 X|sc 9867 X|sc 376174 X|sc 9868 X|sc 13556 X KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat

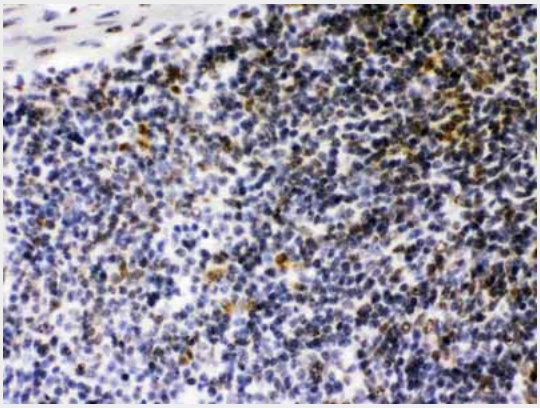
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization
MHC class II transactivator;CIITA;2.3.1.-;2.7.11.1;CIITA;MHC2TA;

Tissue Specificity
MHC class II transactivator



Western blot analysis of CIITA expression in rat thymus extract (lane 1), mouse thymus extract (lane 2) and MCF-7 whole cell lysates (lane 3). CIITA at 123KD was detected using rabbit anti- CIITA Antigen Affinity purified polyclonal antibody (Catalog # ABO12681) at 0.5 Î¼g/mL. The blot was developed using chemiluminescence (ECL) method .



CIITA was detected in paraffin-embedded sections of mouse spleen tissues using rabbit anti- CIITA Antigen Affinity purified polyclonal antibody (Catalog # ABO12681) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .

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Source
123514 MW

Protein Name
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). .

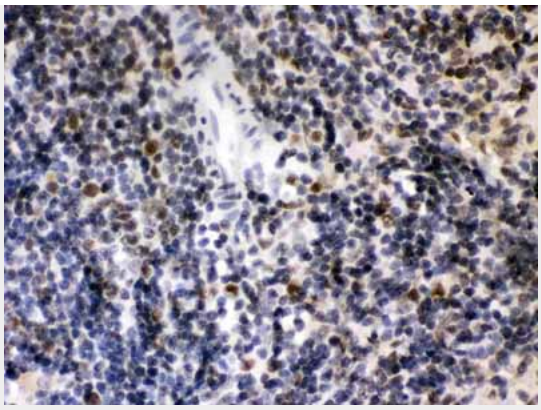
Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E.coli-derived human CIITA recombinant protein (Position: E945-R1130). Human CIITA shares 84.4% amino acid (aa) sequence identity with mouse CIITA.

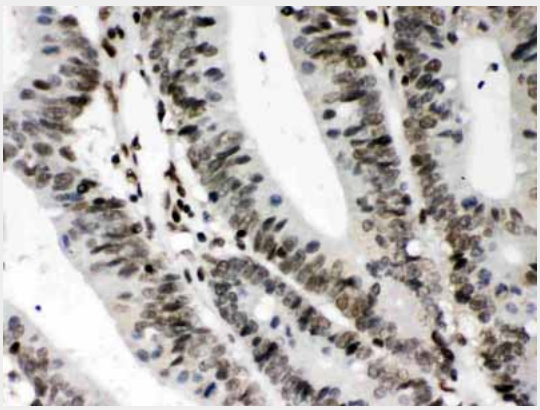
Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**



CIITA was detected in paraffin-embedded sections of rat spleen tissues using rabbit anti- CIITA Antigen Affinity purified polyclonal antibody (Catalog # ABO12681) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .



CIITA was detected in paraffin-embedded sections of human intestinal cancer tissues using rabbit anti- CIITA Antigen Affinity purified polyclonal antibody (Catalog # ABO12681) at 1 ??g/mL. The immunohistochemical section was developed using SABC method .

Anti-CIITA Picoband Antibody - Background

CIITA is a human gene which is mapped to 16p13. 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. Also

Anti-CIITA Picoband 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. 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. Activates CD74 transcription (PubMed:32855215). 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). Has antiviral activity against Ebola virus and coronaviruses, including SARS-CoV-2. 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

Anti-CIITA Picoband 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 Cytomety
- Cell Culture