



## Technical Data Sheet

**Diagenode sa**  
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4000 Liège - Belgium

**Product name:**  
antibody directed against CIITA  
**(MHC class II transactivator)**  
**Other names:** C2TA, MHC2TA

<b>Catalog #:</b> pAb-062-050	<b>Type:</b> Polyclonal <b>ChIP-grade</b>	<b>Size:</b> 50 µg/ 50 µl
<b>Lot #:</b> 001	<b>Source:</b> Rabbit	<b>Concentration:</b> 1.0 µg/µl

**Description:** This antibody has been raised against recombinant CIITA protein.  
CIITA is essential for transcriptional activity of the HLA class II promoter (see overview below).

**Specificity:** Human: positive  
Other species: not tested

Applications	Suggested dilution	References
ELISA	Not tested	
Dot blotting	Not tested	
Western blotting	Not tested	
Gel Supershift	Not tested	
Immunocytochemistry	Not tested	
Flow cytometry	Not tested	
Immunoprecipitation	Not tested	
ChIP	5-7 µg/IP	Fig 1

**Format:** In solution in PBS containing 0.05% azide. The polyclonal antibody has been affinity purified.

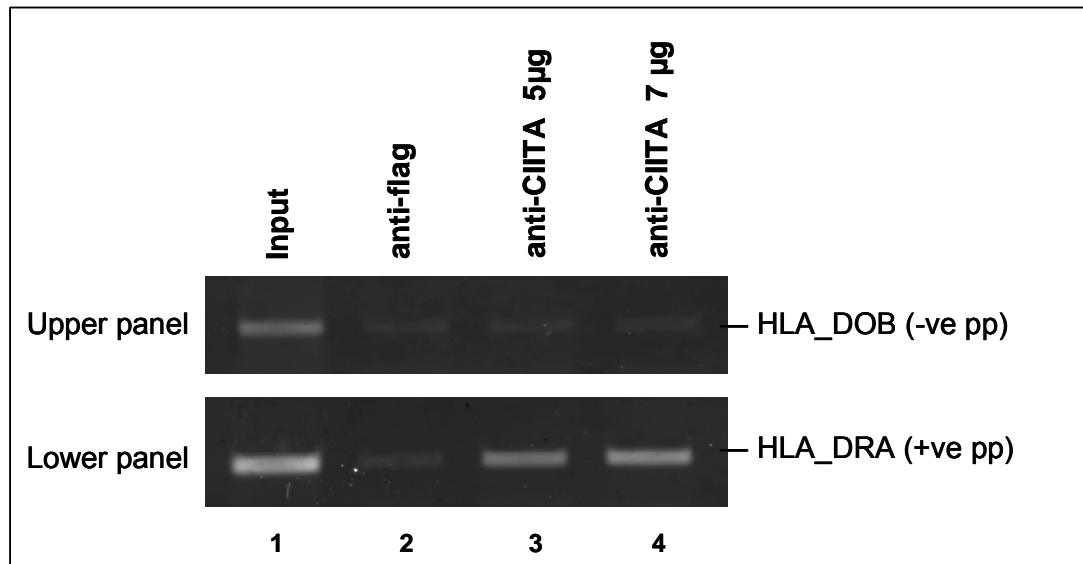
**Storage:** For long storage, store at -20°C/ -80°C. Avoid multiple freeze-thaw cycles.

**Precautions:** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**Availability date:** September 3, 2007. Last data sheet update: September 20, 2007

**Lot #:** 001

**Figure 1**



**ChIP results obtained with the Diagenode antibody directed against CIITA.**

ChIP assays were performed using NALM cells (a cell line derived from human pre-B leukemia), the affinity purified antibody directed against CIITA (cat# pAb-062-050) and optimized primer sets. Chromatin sheared from 2x 10e6 cells and 5 µg (lane 3) and 7 µg (lane 4) of antibody anti-CIITA were used per ChIP experiment. Antibody anti-flag (lane 2) is used as negative IP control. The primer pair HLA\_DRA was used as positive PCR control and HLA\_DOB was used a negative PCR control.

The ChIP results using the Diagenode antibody anti-CIITA (cat# pAb-062-050) show a clear signal for the positive primer pair (HLA\_DRA) with respectively 5 and 7 µg of antibody per IP (Lower panel, lanes 3 and 4) and show no signal for the negative primer pair (HLA\_DOB) (Upper panel, lanes 3 and 4). The input is shown in lane 1 and the negative IP control (antibody anti-flag) is shown in lane 2.

**Overview**

CIITA 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 CIITA may activate HLA class II transcription by modifying proteins that bind to the MHC class II promoter. Defects in CIITA are a cause of bare lymphocyte syndrome type II (BLS II); also known as hereditary MHC class II deficiency or HLA class II-deficient combined immunodeficiency (UniProtKB/Swiss-Prot entry P33076: <http://www.expasy.org/uniprot/P33076>).