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Datasheet for 100-401-249

CIITA Antibody

Overview

Description:	Anti-CIITA aa 1-333 (RABBIT) Antibody - 100-401-249
Item No.:	100-401-249
Size:	100 µL
Applications:	WB, ChIP, IP
Reactivity:	Human
Host Species:	Rabbit

Product Details

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.
Synonyms:	rabbit anti-CIITA Antibody, MHC class II transactivator, CIITA, MHC2TA
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	CIITA
Reactivity:	Human
Immunogen Type:	Recombinant Protein
Immunogen:	The immunogen used for this study was a bacterially produced recombinant FLAG-CIITA corresponding to amino acids 1 through 333 of the human protein.

Purity/Specificity:	Anti-CIITA antibody was prepared from monospecific antiserum by delipidation and defibrination.
Relevant Links:	• UniProtKB - P33076 • NCBI - NP_000237.2 • GeneID - 4261

Application Details

Tested Applications:	WB
Suggested Applications:	ChIP, IP (Based on references)
Application Note:	Anti-CIITA antibody has been tested in western blot. For immunoblotting a 1:500 dilution is recommended. Researchers should determine optimal titers for other applications.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5,000 - 1:25,000
WB:	1:500 - 1:3,000

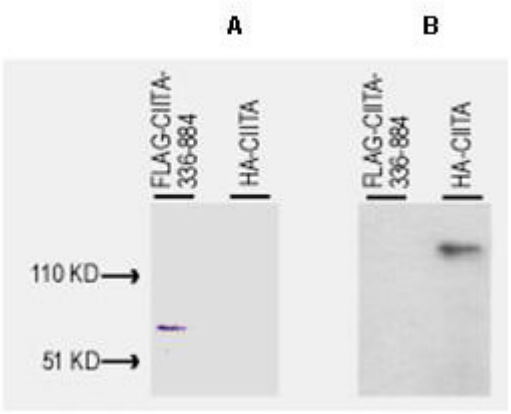
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	90 mg/mL by Refractometry
Buffer:	None
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
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.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot
Western blot of Anti-CIITA (1-333) antibody, generated by immunization with bacterially produced FLAG-CIITA aa 1-333, was tested by western blot against lysates of Cos-7 cells after transient transfection, separately, with pcDNA3-FLAG-CIITA-336-884 and pcDNA3-HA-CIITA. For transfection, Fugene 6 (Roche) was used according to the manufacturer's instructions for a 6-well plate format. Cells were lysed 24 h post-transfection in 200 µL of 1x SDS-sample buffer, heated at 96°C for 5', and vortexed for 30 sec. Samples (10 µL each) were separated on a 12% SDS-PAGE gel and transferred to PVDF (Millipore) followed by blocking for 45' using TTBS supplemented with 5% non-fat dry milk. All incubations were performed at room temperature. In panel A, both samples on PVDF were incubated with 10 µg/mL mouse anti-FLAG antibody (Sigma) for 45'. After 5X washes with TTBS, reaction with ALP rabbit anti-mouse IgG at 200 ng/mL proceeded for 45' following again by washing as before. The blot was developed using BCIP/NBT. This blot demonstrates that FLAG-CIITA-336-884 was successfully over-expressed in the Cos-7 cells. In panel B, both samples on PVDF were incubated with a 1:500 dilution of Rockland's anti-CIITA (1-333) for 45'. After 5X washes with TTBS, reaction with HRP goat anti-rabbit IgG at 10 ng/mL proceeded for 45' following again by washing as before. The membrane was covered with Pico West Substrate solution (Pierce) for 5' and was then placed between the two layers of a standard sheet protector. Kodak O-MAT film was exposed to the blot for 30 sec and was immediately developed. The lane containing the lysate of pcDNA3-HA-CIITA transfected cells contains a single band at ~130 kDa molecular weight, whereas the lane containing lysate from pcDNA3-FLAG-CIITA-336-884 transfected cells shows no reactivity. This blot demonstrates that anti-CIITA (1-333) is specific for amino acids 1-333 of CIITA and that the antibody is not cross reactive with the FLAG portion of the immunogen.

References

- Su C et al. EBNA2 driven enhancer switching at the CIITA-DEXI locus suppresses HLA class II gene expression during EBV infection of B-lymphocytes. *PLoS Pathog.* (2021)
- Majumder P. et al. The Murine MHC Class II Super Enhancer IA/IE-SE Contains a Functionally Redundant CTCF-Binding Component and a Novel Element Critical for Maximal Expression. *J Immunol.* (2021)
- Majumder P. et al. A super enhancer controls expression and chromatin architecture within the MHC class II locus. *J Exp Med* (2020)
- Scharer et al. Genome-wide CIITA-binding profile identifies sequence preferences that dictate function versus recruitment. *Nucleic Acids Research* (2015)
- Uetani K et al. Influenza A virus abrogates IFN-c response in respiratory epithelial cells by disruption of the Jak/Stat pathway. *Eur J Immunol.* (2008)
- Koues OI et al. Regulation of Acetylation at the Major Histocompatibility Complex Class II Proximal Promoter by the 19S Proteasomal ATPase Sug1. *Mol Cell Biol.* (2008)
- Kohoutek J et al. Hexim1 sequesters positive transcription elongation factor b from the class II transactivator on MHC class II promoters. *Proc Natl Acad Sci USA.* (2006)
- Kretsovali A et al. Self-association of Class II Transactivator Correlates with Its Intracellular Localization and Transactivation. *J Biol Chem.* (2001)

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