

**CIITA Antibody**

**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W, IP	<b>Reactivity:</b> H	<b>Sensitivity:</b> Transfected Only	<b>MW (kDa):</b> 140	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #P33076	<b>Entrez-Gene Id:</b> 4261
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**Product Usage Information****Application**

Western Blotting  
Immunoprecipitation

**Dilution**

1:1000  
1:50

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

CIITA Antibody detects transfected levels of total CIITA protein.

**Source / Purification**

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Glu149 of human CIITA. Antibodies are purified by peptide affinity chromatography.

**Background**

MHC class II (MHC-II) proteins play critical roles in cellular immune responses and their expression is mainly regulated by the non-DNA binding transcription factor CIITA (MHC class II transactivator) (1,2). CIITA expression is upregulated by IFN-γ and it in turn enhances MHC-II expression and represses collagen expression (3,4). CIITA has a limited number of transcriptional targets, most of which are involved in MHC-mediated antigen presentation (5). Mutations in the CIITA are associated with the hereditary immunodeficiency disease Bare Lymphocyte Syndrome (BLS) which is characterized by a nearly complete absence of MHC-II expression (also referred to as MHC-II deficiency) (6,7).

**Background References**

1. Ting, J.P. and Trowsdale, J. (2002) *Cell* 109 Suppl, S21-33.
2. Drozina, G. et al. (2005) *Curr Top Microbiol Immunol* 290, 147-70.
3. Dong, Y. et al. (1999) *J Immunol* 162, 4731-9.
4. Buttice, G. et al. (2006) *Circ Res* 98, 472-9.
5. Krawczyk, M. et al. (2008) *PLoS Genet* 4, e1000058.
6. Reith, W. and Mach, B. (2001) *Annu Rev Immunol* 19, 331-73.
7. Waldburger, J.M. et al. (2000) *Immunol Rev* 178, 148-65.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting **IP:** Immunoprecipitation

**Cross-Reactivity Key**

**H:** Human

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