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CIITA antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI11344

Product Information

Application	WB
Primary Accession	P33076
Other Accession	NM_000246, NP_000237
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Horse, Bovine
Predicted	Human, Rat, Rabbit, Chicken, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	123415

Additional Information

Gene ID	4261
Alias Symbol	C2TA, CIITA IV, MHC2TA, NLRA, CIITAIV
Other Names	MHC class II transactivator, CIITA, 2.3.1.-, 2.7.11.1, CIITA, MHC2TA
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-CIITA antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	CIITA antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

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

References

Lovkvist,H., (er) Eur. J. Hum. Genet. (2008) In pressReconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.

Images

WB Suggested Anti-CIITA Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:62500
Positive Control: Human Liver