

# Isoforms of the class II transactivator protein

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The class II transactivator (CIITA) controls both the constitutive and IFN- $\gamma$  inducible expression of HLA-D genes. In addition, through the squelching of another transactivator CREB-binding protein, CIITA was more recently shown to have a wider cellular function, including cell cycle control or cellular response to IFN- $\gamma$  and IL-4. However, due to its low expression level, its analysis mainly relies on the study of recombinant overexpressed forms of the protein. We report here the analysis of native CIITA in various cell types. We first show the precise timing of CIITA protein expression in a fibroblast cell line in response to IFN- $\gamma$ . This expression is observed 2 h after the cytokine addition with a peak of expression ranging from 16 to 24 h. We next show the existence of two major isoforms of the CIITA protein differentially expressed in fibroblast, B lymphocyte or melanoma cell lines. We present the first demonstration that these isoforms originate from alternative translation initiation