

A gene family encoding heterogeneous histone H1 proteins in *Trypanosoma cruzi*

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A gene family encoding a set of histone H1 proteins in *Trypanosoma cruzi* is described. The sequence of 3 genomic and 4 cDNA clones revealed the presence of several motifs characteristic of histone H1 although heterogeneity at the polypeptide level was evident. The clones encode histone H1 proteins of an unusually small size (74-97 amino acids) which lack the globular domain found in histone H1 of higher eukaryotes. All histone H1 mRNAs from *T. cruzi* are polyadenylated although no typical polyadenylation signal was found. Furthermore the genes encoding the histone H1 proteins in *T. cruzi* are found in a tandem array containing 15-20 gene copies per haploid genome. This tandem array is located on a large chromosome of 2.2 Mb. © 1994.