

# t-Butyl-4-hydroxyanisole, a novel respiratory chain inhibitor. Effects on *Trypanosoma cruzi* epimastigotes

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t-Butyl-4-hydroxyanisole, an antioxidant food additive, inhibited the growth of *Trypanosoma cruzi* by almost 100% at 0.5 mM concentration. This compound inhibited 70% of oxygen consumption of epimastigotes. The redox level of NAD(P) was shifted to a more reduced state and inversely the redox level of cytochrome b changed to a more oxidized state. This hydroxyanisole thus is a new electron transport chain inhibitor. This compound and related ones, or the respiratory chain of *T. cruzi*, may be important in the design of antichagasic drugs. © 1986.