Retraction

Trypanosoma brucei glycosomal glyceraldehyde-3phosphate dehydrogenase genes are stage-regulated at the transcriptional level

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The EMBO Journal, 10, 3861-3868, 1991.

In the above-mentioned paper we reported the mapping of the promoter for the glycosomal glyceraldehyde-phosphate dehydrogenase (gGAPDH) genes of Trypanosoma brucei. The promoter was located by testing the ability of regions 5' of the gene to mediate expression of a linked CAT reporter gene upon introduction into the parasite by electroporation. However, recent experiments in our laboratory have shown that the observed CAT expression should not be attributed to a specific trypanosome promoter, but rather to CAT contamination in the DNA preparations used. When highly purified plasmid DNA was introduced in either bloodstream form or procyclic T.brucei cells, by standard transfection techniques, we could never observe any significant synthesis of CAT. Our published data on the location of the promoter seemed to be consistent with the mapping of a transcription initiation site by RNase protection experiments and primer extension, described in the same paper. However, in recently performed nuclear run-on assays we did not find evidence for transcription initiation near the putative promoter area. Transcription seems to start much further upstream of the genes. We feel that these new data show that we cannot substantiate our previous claim to have mapped the promoter of the gGAPDH genes. Serious doubts also exist about our conclusions concerning the stage-dependent regulation of the gGAPDH genes at the transcriptional level. Those conclusions were mainly based on CAT assays of trypanosomes electroporated in the presence of not fully purified plasmid DNA. In light of these new findings we prefer to withdraw the paper.

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