

## Identification of adhesion molecule expressed at the insect stage of an African trypanosome

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*Trypanosoma congolense*, a causative agent of animal African trypanosomiasis, is biologically transmitted by tsetse flies (*Glossina* spp.). The parasite undergoes cell differentiation during its lifecycle. Among three cell differentiation stages in the tsetse fly, only the epimastigote form (EMF) shows an adherent phenotype. It has been reported that cell adhesion of the EMF is a fundamental process for progression of its differentiation to the animal-infective metacyclic form. Recently, we found that the culture supernatant of the EMF contained a molecule involved in cell adhesion, and we tentatively named it trypanosome-derived cell adhesion molecule (TAM). Molecular mass of native TAM was 100 kDa. Adhesion activity of the native TAM was totally inhibited by heat (65 and 100°C), sodium periodate and proteinase K treatment. The full-length TAM gene (2,067 bp) was successfully cloned from an EMF cDNA library. TAM appeared to be localized on the cell surface of the EMF and the flagellum of the bloodstream form. According to the results of a BLAST search, TAM appears to be a new *T. congolense* protein. TAM appears to be a novel glycoprotein that is expressed on the EMF cell surface and is involved in cell adhesion processes in the EMF.