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Expression of *Babesia rodhaini* Antigen and Induction of Protection by Recombinant Antigen

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Babesia rodhaini is an intra-erythrocytic parasite of rodent and causes lethal infection in mice. A cute infection can be cured by chemotherapy in mice and recovered mice are resistant to reinfection. Monoclonal antibodies raised against *B. rodhaini* have been reported to bind the surface of the parasite. These proteins recognized by the monoclonal antibodies induce a degree of protective immunity in mice [1] and DNA sequences encoding these proteins (p17 and p26) were reported [2]. The purpose of present study was to produce recombinant antigen and to examine protective and immunological roles of the recombinant antigen against *B. rodhaini* infection in mice.

The p26 gene was amplified by PCR from genomic DNA isolated from the *B. rodhaini* and inserted into *Bam* HI site of baculovirus transfer vector pBacPAK8 and a recombinant virus expressing p26 gene (AcBr26) was isolated. Sf-9 cells were infected with AcBr26 and expression of recombinant p26 antigen was examined by indirect immunofluorescent antibody test and westernblot analysis. Recombinant protein was recognized by immune serum from drug-cured *B. rodhaini* immune mice. BALB/c mice were immunized with the recombinant antigen and challenged with *B. rodhaini*. Preliminary results showed that recombinant protein could induce the partial protection in immunized mice against *B. rodhaini* challenge infection.

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