

P37

Identification and Characterization of an Immunodominant Surface Antigen in *Salmonella typhimurium*

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Salmonella typhimurium, a Gram negative enteric pathogen, has been adapted to use as recombinant attenuated live vaccines after deletion gene(s) encoding virulence factors. Although *S. typhimurium* live vaccine induces protective immunity after immunization, it is not clear what kinds of immunity are associated with protection. Except anti-LPS antibody, there is no obvious evidence regarding antibody responses against *Salmonella* somatic antigen. To identify immunodominant proteinous *Salmonella* antigen, *S. typhimurium* χ 8501 ($\Delta crp-28$) was administrated into BALB/c mouse with single 10^9 CFU oral dose. Sera were collected at 4 weeks postimmunization and were analyzed various ways to identify immunodominant antigen. A surface protein exhibiting approximately 43 kDa molecular weight was identified by Westernblot analysis. The proteins were purified with several biochemical approaches. Getting N-terminus sequence of the protein is in progress.