

P54

## Identification of *Salmonella typhimurium* immunodominant surface antigen

Kim, Young Hee, Ji Seon Yang and Ho Young Kang

Department of Microbiology, Division of Biological Sciences College  
of Natural Sciences, Pusan National University

Experimental infection of animals with *Salmonella typhimurium* induces strong immune responses against *Salmonella* somatic antigens. Although little is known about specific *Salmonella* antigens inducing immune responses, it is obvious that the antigen inducing strong immunity is located in outer membrane of *S. typhimurium*. We detected an outer membrane protein recognized strongly with serum obtained from the *Salmonella*-infected animal. The protein was purified with several biochemical approaches. The analyses of the N-terminus sequence of the protein identified as an *OmpA* protein. To investigate the role of *OmpA* in *Salmonella* infection, it is necessary to be generated an *ompA* mutant. The *ompA* mutant will be generated by allelic exchange with the use of recombinant suicide plasmid. Both 5' flanking DNA of *ompA* and 3' flanking DNA of *ompA* was subcloned into cloning vector. Subcloned DNA fragments will be used in the construction of recombinant suicide plasmid.